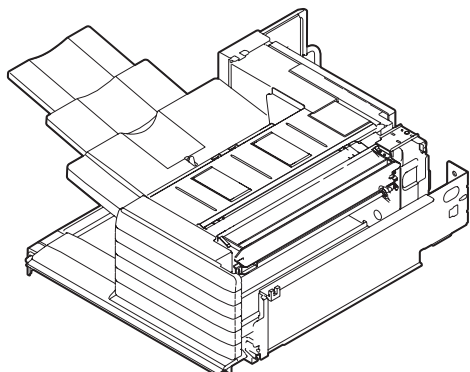


SHARP SERVICE MANUAL

CODE: 00ZMXFNX1/S1E



DIGITAL FULL COLOR MULTIFUNCTIONAL SYSTEM OPTION FINISHER / PUNCH MODULE

MX-FNX1
MODEL MX-PNX1A/B/C/D

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■ PARTS GUIDE

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

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[1] PRODUCT OUTLINE

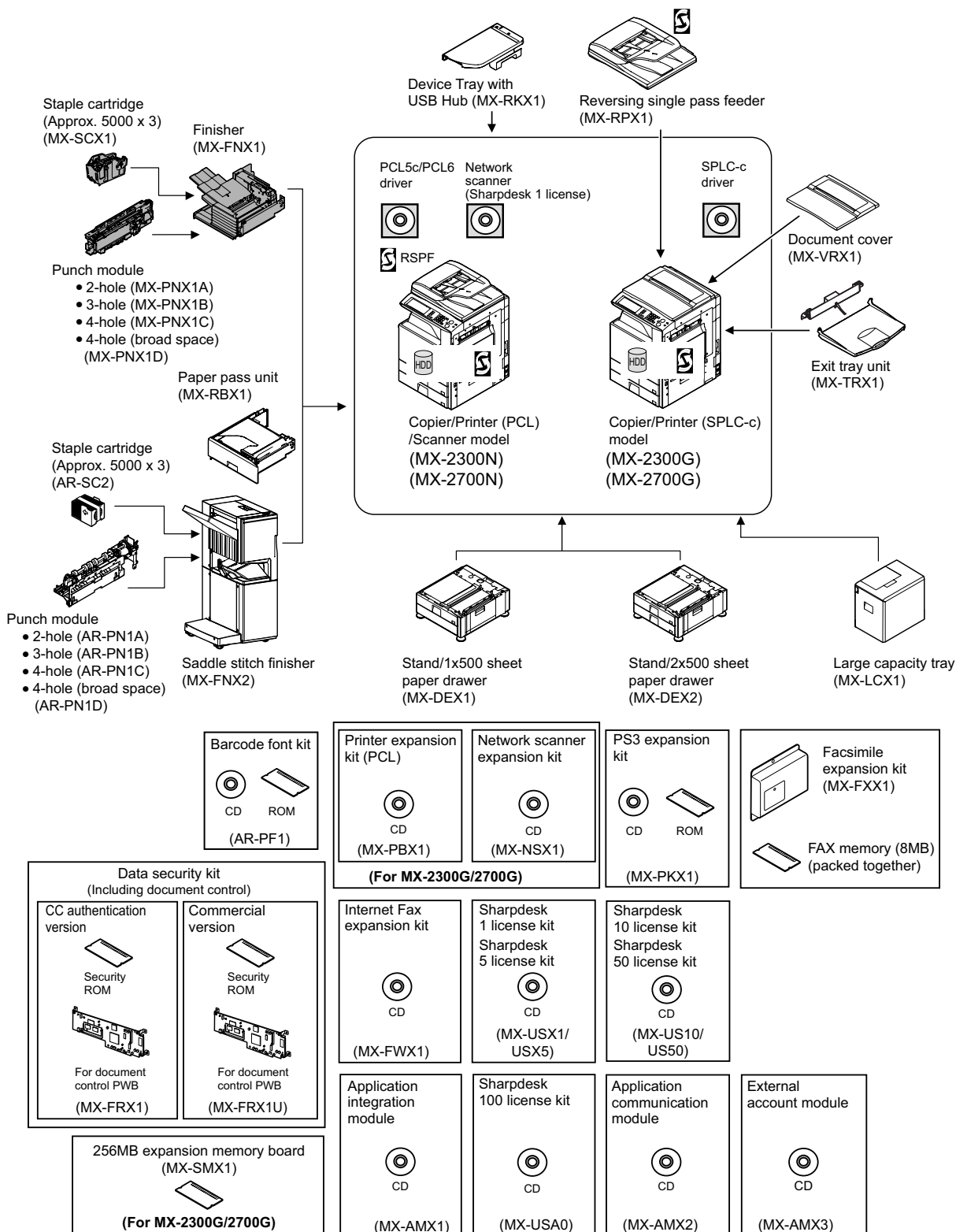
This unit is used by installing to the main unit for after-process of copy and FAX output paper. It is provided with the offset function which discharges output paper by shifting one by one.

Since it is installed to the center tray section of the main unit, no extra space for installation is required.

- 1) 3 kinds of auto staple functions: There are 3 kinds of stapling positions. (One position in front, one position backward, 2 positions at the center).
- 2) Punch function (option): By installing the punch unit, paper can be punched to make binder holes. (Paper of 64 to 128g/m² can be used. OHP film cannot be used.)

Models enable to install the unit	MX-2300G/2700G/2300N/2700N
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The finisher requires a staple cartridge as a consumable part. (Staple cartridge (about 5,000 staples x 3 pcs.) MX-SCX1)



[2] SPECIFICATIONS

1. MX-FNX1

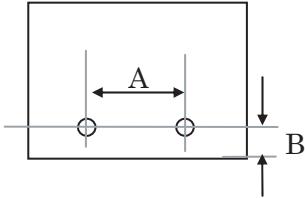
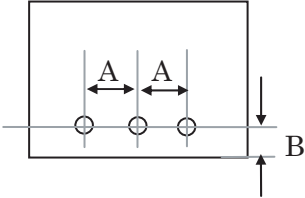
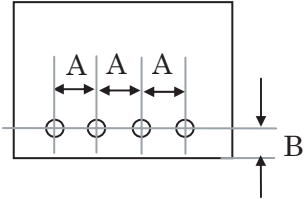
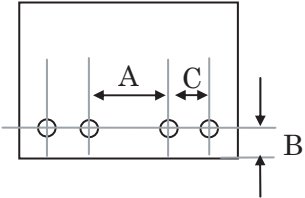
Type	Inner finisher
Loading method	Offset tray
Transport speed	23, 27, 35, 45 PPM
Tray type	Offset tray
Transport reference	Center reference
Paper exit direction	Face down
Paper weight	Plain paper: 60 to 105g/m ² (16 to 28 lbs) Thin paper: 55 to 59g/m ² (15 to 16 lbs) Heavy paper: 106 to 209g/m ² (28 to 56 lbs) Special paper: OHP sheet, label sheet, envelopes, tab paper: Limited to non-sort (up to 10 sheets).
Mode type	Non-stapled, stapled
Paper sizes allowed for offset	A3, B4, A4, A4R, B5, 8K, 16K, 11" x 17", 8.5" x 14", 8.5" x 13", 8.5" x 11", 8.5" x 11"R
Offset quantity	30mm, 1.2 inch
Discharged paper size	A3, B4, A4, A4R, A5R, B5, B5R, 8K, 16K, 16KR, 12" x 18", 11" x 17", 8.5" x 14", 8.5" x 13", 8.5" x 11", 8.5" x 11"R, 5.5" x 8.5"R, 7.25" x 10.5"R, A3 wide, special paper
Sortable size	Metric series Large size: A3, B4, 8K Small size: A4, A4R, B5, 16K Inch series Large size: 11" x 17", 8.5" x 14", 8.5" x 13" Small size: 8.5" x 11", 8.5" x 11"R
Stack tray max. load capacity	Large size: Max. 250 sheets or max. 30 sets or 35.5mm Small size: Max. 500 sheets (For special paper, max. 10 sheets can be loaded on the tray.) or max. 30 sets or 71mm
Staplable paper weight	60 to 128g/m ² (16 to 34 lbs) * However, "106 to 128g/m ² (28 to 34 lbs)" is enable only for two sheets.
Staplable paper size	A3, B4, A4, A4R, B5, 8K, 16K, 16KR, 11" x 17", 8.5" x 14", 8.5" x 13", 8.5" x 11", 8.5" x 11"R
Staplable paper quantity (Max.)	Max. 50 sheets (for small size, 90g/m ² (24 lbs)) Max. 30 sheets (for large size, 90g/m ² (24 lbs))
Stapling	3 kinds (One position in front, one position backward, 2 positions).
Staple supply system	Staple sheet cartridge replacement system (Staple cartridge (Approx. 5,000 x 3 pcs.) MX-SCX1)
Staple detection	Staple empty detection (Near empty detection: 20 staples remained)
Manual stapling	No
External dimensions (W x D x H)	440 x 595 x 205 (mm), 17 21/64 x 23 27/64 x 8 5/64 (inch) (with tray extended: 640 x 595 x 205 (mm), 25 12/64 x 23 27/64 x 8 5/64 (inch))
Weight	Approx. 13kg (28.7 lbs)
Power source	Supplied from the main unit power source. (DC24V, DC5V)
Power consumption	55.2W
Installation/maintenance	Installed by service personnel
Optional detection	Auto detection supported
Packaged items	Parts for mounting, operational sheet, staple directional instruction label, installation cautionary note

2. MX-PNX1A/B/C/D

Type	Punch unit for the inner finisher
Punch type	2 holes / 3 holes / 4 holes / 4 holes (wide) A punch unit that provides all of these 4 types can be installed.
Transport speed	23, 27, 35, 45 PPM
Transport reference	Center reference
Punch dust full detection	YES (Lever system)
Paper exit direction	Face down
Paper weight	Plain paper: 60 to 105g/m ² (16 to 28 lbs) Thin paper: 55 to 59g/m ² (15 to 16 lbs) Heavy paper: 106 to 209g/m ² (28 to 56 lbs)
Punchable paper size	2 holes (MX-PNX1A) A3, B4, A4, A4R, B5, B5R, 11" x 17", 8.5" x 14", 8.5" x 13", 8.5" x 11", 8.5" x 11"R, 8K, 16K, 16KR 3 holes *1 (MX-PNX1B) 3 holes: A3, A4, 11" x 17", 8.5" x 11" 2 holes: 8.5" x 14", 8.5" x 13", 8.5" x 11"R 4 holes (MX-PNX1C) A3, A4 4 holes (wide) (MX-PNX1D) A3, B4, A4, A4R, B5, B5R, 11" x 17", 8.5" x 14", 8.5" x 13", 8.5" x 11", 8.5" x 11"R
Power source	Supplied from the inner finisher. (DC24V, DC5V)
External dimensions (W x D x H)	105 x 518 x 170 (mm), 4 9/64 x 20 25/64 x 6 45/64 (inch)
Weight	Approx. 3.5kg (7.7 lbs)
Packaged items	Parts for mounting, instructional label for punch direction, instructional label for garbage pickup, installation cautionary note

*1: Auto switching: 2 holes/3 holes

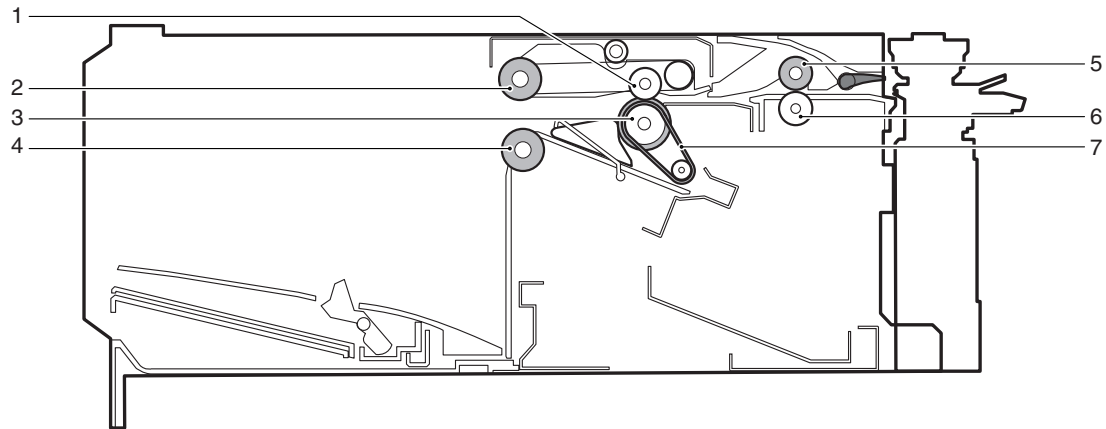
Kind of hole punch

Kind	Hole position		Hole size
2 holes (MX-PNX1A)		A: 80±1mm B: 12±3mm	φ6.5mm
3 holes (MX-PNX1B)		A: 108±1mm B: 12±3mm	φ8.0mm
4 holes (MX-PNX1C)		A: 80±1mm B: 12±3mm	φ6.5mm
4 holes (wide) (MX-PNX1D)		A: 70±1mm B: 12±3mm C: 21±1mm	φ6.5mm

[4] EXTERNAL VIEW AND INTERNAL STRUCTURE

1. Identification of each section and functions

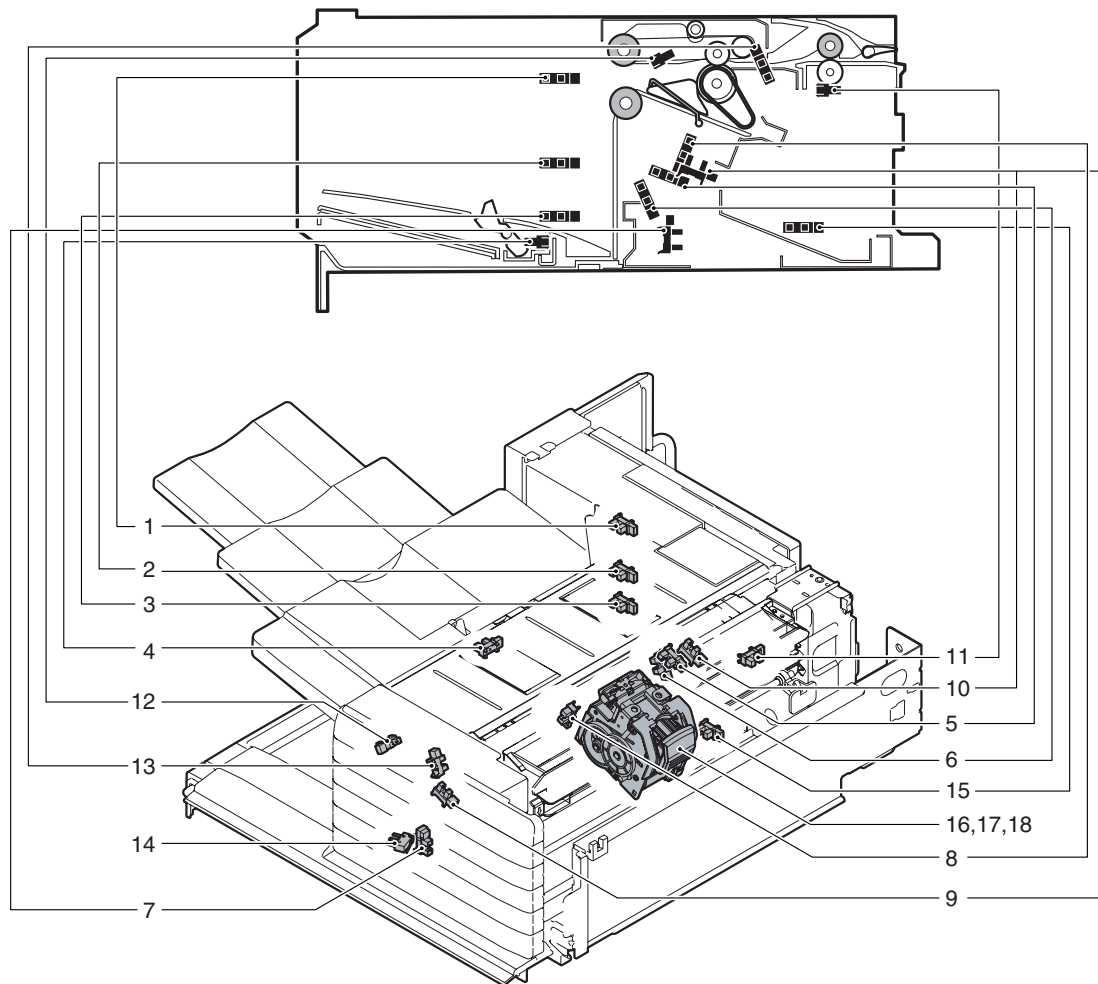
A. Internal structure



No.	Name
1	Paper exit roller
2	Bundle exit paper transport roller
3	Paper exit roller
4	Bundle exit paper transport roller
5	Inlet port paper transport roller
6	Inlet port paper transport roller
7	Take-up belt

B. Sensors and switches

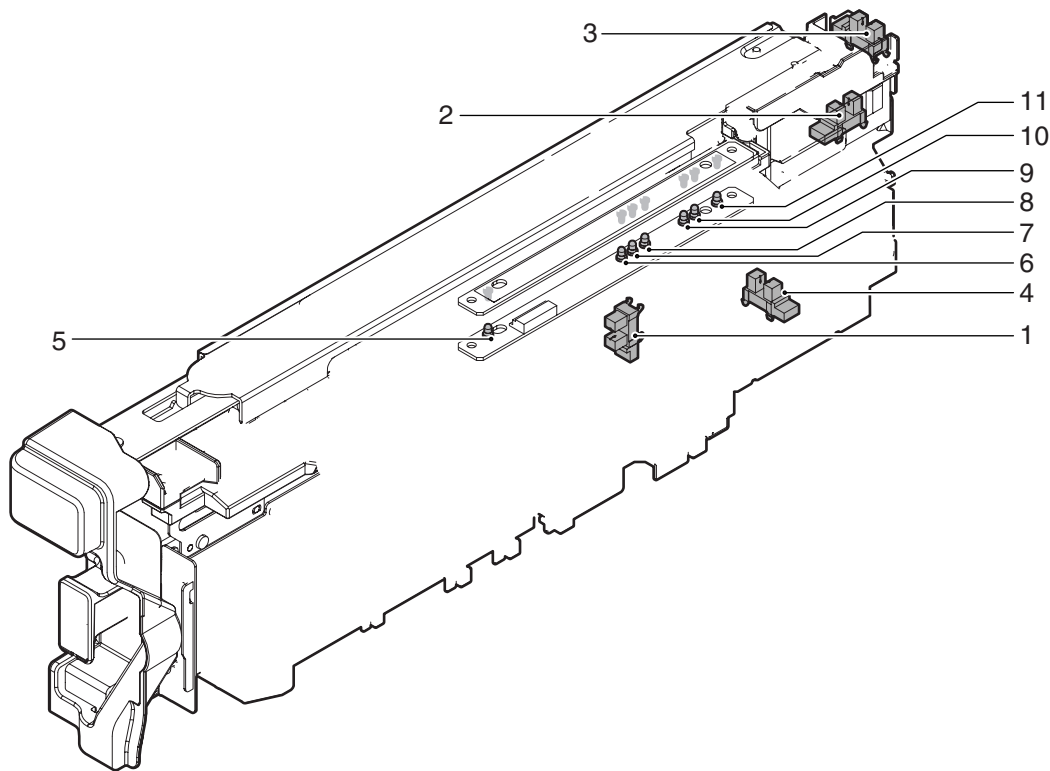
(1) MX-FNX1



No.	Signal	Name	Type	Function/Operation	Output
1	FULD	Tray upper limit sensor	Photo interrupter	Detects the upper limit position of the paper load tray up/down shift area.	TP1 is driven to "L" at the upper limit position.
2	FMLLD	Tray intermediate lower limit sensor	Photo interrupter	Detects the intermediate position of the paper load tray up/down shift area.	TP2 is driven to "L" at the intermediate position.
3	FLLD	Tray lower limit sensor	Photo interrupter	Detects the lower limit position of the paper load tray up/down shift area.	TP3 is driven to "L" at the lower limit position.
4	FBED	Tray paper empty sensor	Photo interrupter	Detects paper empty in the paper load tray.	TP4 is driven to "L" when paper is provided.
5	FSLD1	Paper surface sensor 1	Photo interrupter	Detects the surface position of paper on the tray in combination of the both sensors outputs.	*Refer to the separate table outside the column.
6	FSLD2	Paper surface sensor 2	Photo interrupter		
7	FSTHPD	Stapler HP sensor	Photo interrupter	Detects the home position of the stapler unit in F/R direction shift.	TP7 is driven to "H" at the home position.
8	FSTPD	Empty sensor	Photo interrupter	Detects paper empty on the process tray.	TP8 is driven to "H" when paper is provided.
9	FFJHPD	Alignment plate HP sensor F	Photo interrupter	Detects the home position of the alignment guide on F side.	TP9 is driven to "L" at the home position.
10	FRJHPD	Alignment plate HP sensor R	Photo interrupter	Detects the home position of the alignment guide on R side.	TP10 is driven to "L" at the home position.
11	FED	Inlet port sensor	Photo interrupter	Detects paper in the inlet port of the finisher.	TP11 is driven to "H" when paper is provided.
12	FRLD	Roller up/down sensor	Photo interrupter	Detects the upper standby position of up/down movement of the bundle exit roller.	TP12 is driven to "L" when the roller reaches the upper standby position.
13	FBRD	Take-up belt sensor	Photo interrupter	Detects up/down positions of the take-up belt.	TP13 is driven to "L" when the take-up belt is on the upper side.
14	FDSW	Front cover switch	Photo interrupter	Detects open/close of the jam release cover in the front section.	TP15 is driven to "L" when the cover is closed.
15	FJPD	Alignment plate position sensor	Photo interrupter	Detects entry of the process section rear edge stopper into the opening of the stapler and inhibits stapling.	TP50 is driven to "L" when the stopper enters the opening of the stapler.
16	FSHPD	Stapler home sensor		Detects the home position of the stapling mechanism. (Sensor built in the stapler unit)	TP51 is driven to "H" at the home (standby) position.
17	FSD	Staple empty sensor		Detects staple empty. (Sensor built in the stapler unit)	TP53 is driven to "L" when staple empty.
18	FSTD	Self priming sensor		Detects the staple feed is completed and it is ready for stapling. (Sensor built in the stapler unit)	TP52 is driven to "H" when in the ready state.

FSLD1 TP5	FSLD2 TP6	State
"L"	"H"	The paper detection lever is in the save position.
"H"	"H"	The paper surface is upper than the reference level.
"H"	"L"	The paper surface is at the reference level.
"L"	"L"	The paper surface is lower than the reference level.

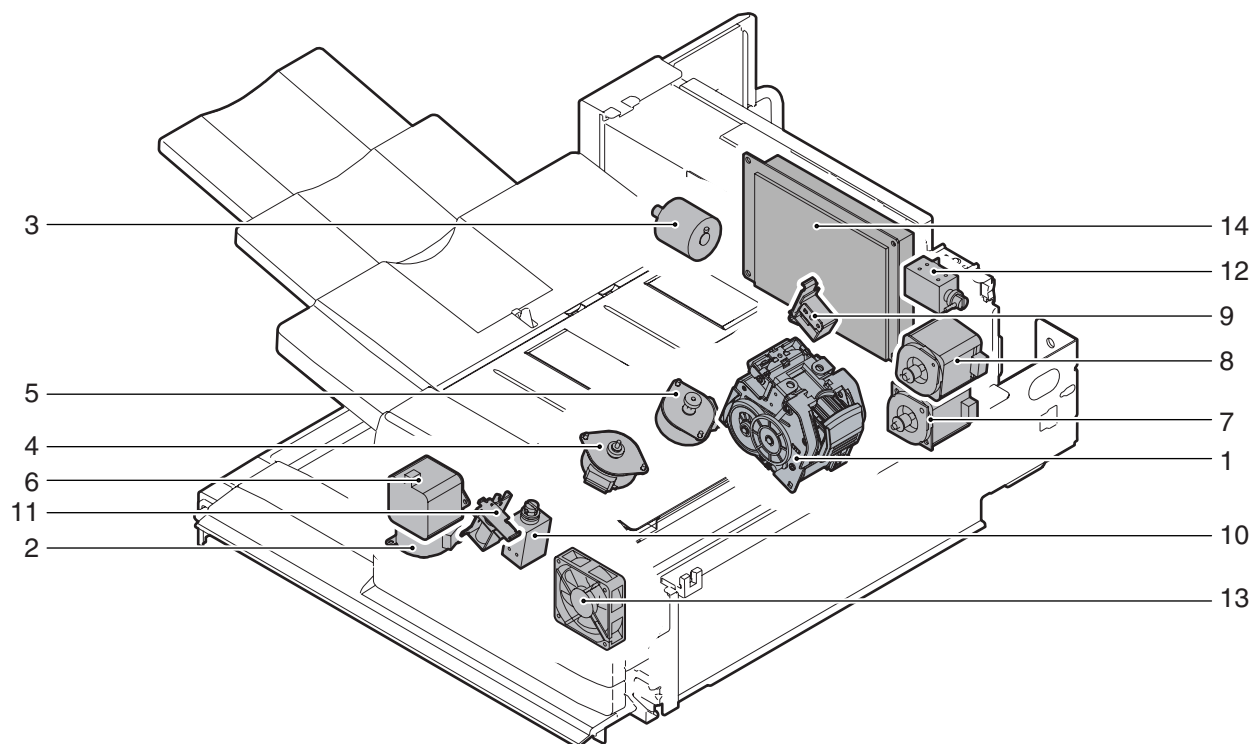
(2) MX-PNX1A/B/C/D



No.	Signal	Name	Type	Function/Operation	Output
1	FPDD	Full sensor	Photo interrupter	Detects full of the punch dust container.	When full, TP2 on the punch PWB remains "H" level.
2	FPHPD	Punch position sensor	Photo interrupter	Detects the home position of the punch up/down shift.	TP47 on the control PWB of the inner finisher is driven to "H" at the home position.
3	FPRPD	Rear position sensor	Photo interrupter	Detects the lower limit position of 3-hole side up/down shift in 2/3-hole punching.	TP48 on the control PWB of the inner finisher is driven to "H" at the lower limit position.
4	FPSHPD	Horizontal shift HP sensor	Photo interrupter	Detects the home position in the punch position horizontal resist correction mechanism.	TP49 on the control PWB of the inner finisher is driven to "H" at the home position.
5	FPPEND	Paper rear edge sensor	Transmission type sensor	Detects the lead edge and the rear edge of paper to be punched.	TP54 on the control PWB of the inner finisher is driven to "L" when paper is provided.
6	FPPD1	Paper horizontal resist sensor 1	Transmission type sensor	Detects the paper edge in the rear side of B5R or 7.25" x 10" R size width direction of the machine.	TP55 on the control PWB of the inner finisher is driven to "L" when paper is provided.
7	FPPD2	Paper horizontal resist sensor 2	Transmission type sensor	Detects the paper edge in the rear side of 16K-R size width direction of the machine.	TP55 on the control PWB of the inner finisher is driven to "L" when paper is provided.
8	FPPD3	Paper horizontal resist sensor 3	Transmission type sensor	Detects the paper edge in the rear side of 8.5" x 14", 8.5" x 11"R, 8.5" x 13", or A4R size width direction of the machine.	TP55 on the control PWB of the inner finisher is driven to "L" when paper is provided.
9	FPPD4	Paper horizontal resist sensor 4	Transmission type sensor	Detects the paper edge in the rear side of B4 or B5 size width direction of the machine.	TP55 on the control PWB of the inner finisher is driven to "L" when paper is provided.
10	FPPD5	Paper horizontal resist sensor 5	Transmission type sensor	Detects the paper edge in the rear side of 11" x 17", 8.5" x 11", 8K, or 16K size width direction of the machine.	TP55 on the control PWB of the inner finisher is driven to "L" when paper is provided.
11	FPPD6	Paper horizontal resist sensor 6	Transmission type sensor	Detects the paper edge in the rear side of A3 or A4 size width direction of the machine.	TP55 on the control PWB of the inner finisher is driven to "L" when paper is provided.

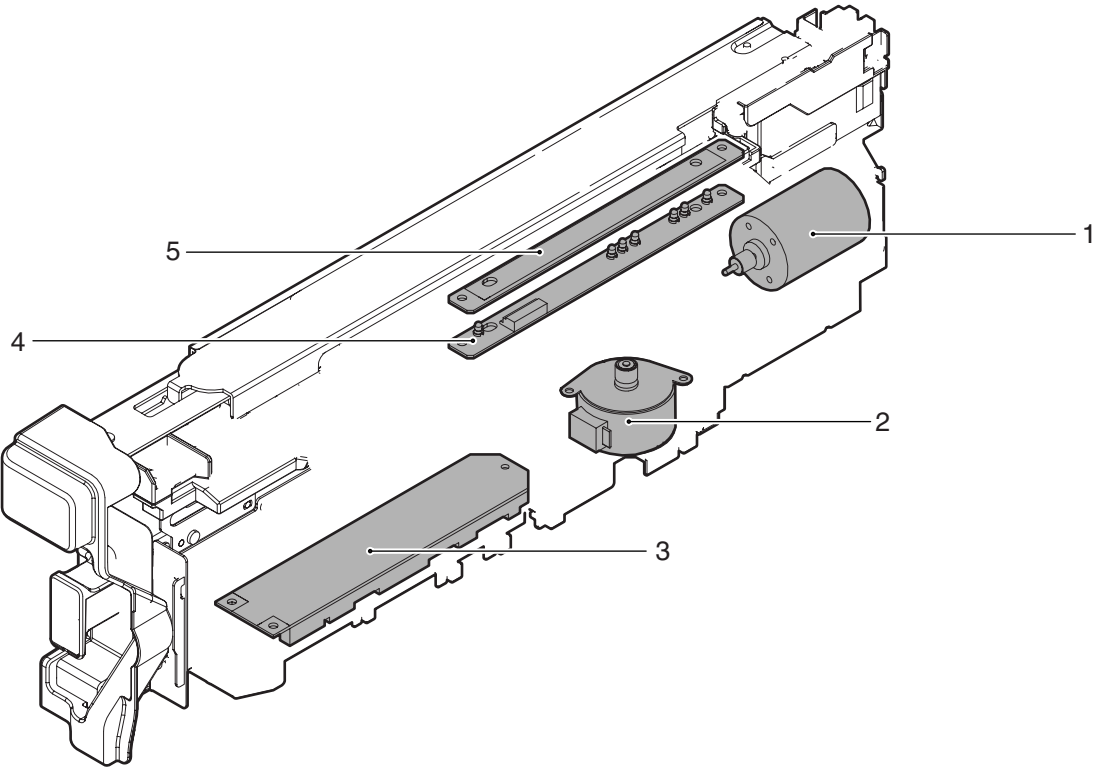
C. Motors, solenoids, and PWB

(1) MX-FNX1



No.	Signal	Name	Function
1	FFSM	Staple motor	Drives the stapling mechanism. (Stapler unit built-in motor)
2	FSM	Staple shift motor	Shifts the stapler unit in the F/R direction.
3	FTLM	Tray motor	Drives the paper load tray up/down.
4	FFJM	Alignment motor F	Drive the alignment guide on the F side.
5	FRJM	Alignment motor R	Drive the alignment guide on the R side.
6	FSWM	Roller upper/lower roller	Drives the bundle exit roller up/down.
7	FAM	Bundle exit motor	Drives the bundle exit roller and the paddle.
8	FRM	Transport motor	Drives the inlet port roller, the feed roller, and the take-up belt.
9	FPDS	Paddle one-rotation solenoid	Trigger solenoid for paddle one-rotation.
10	FSLS	Paper surface detection solenoid	Drives the lever for paper holding and detection of the tray paper surface.
11	FBRS	Belt separation solenoid	Trigger solenoid for up/down shift of the take-up belt.
12	FINRPS	Flapper solenoid	Drives the flapper to select the entry path between the finisher inside and the reverse path.
13	FFAN	Fan	Cools the inlet port of the finisher.
14	—	Control PWB	Controls the inner finisher.

(2) MX-PNX1A/B/C/D

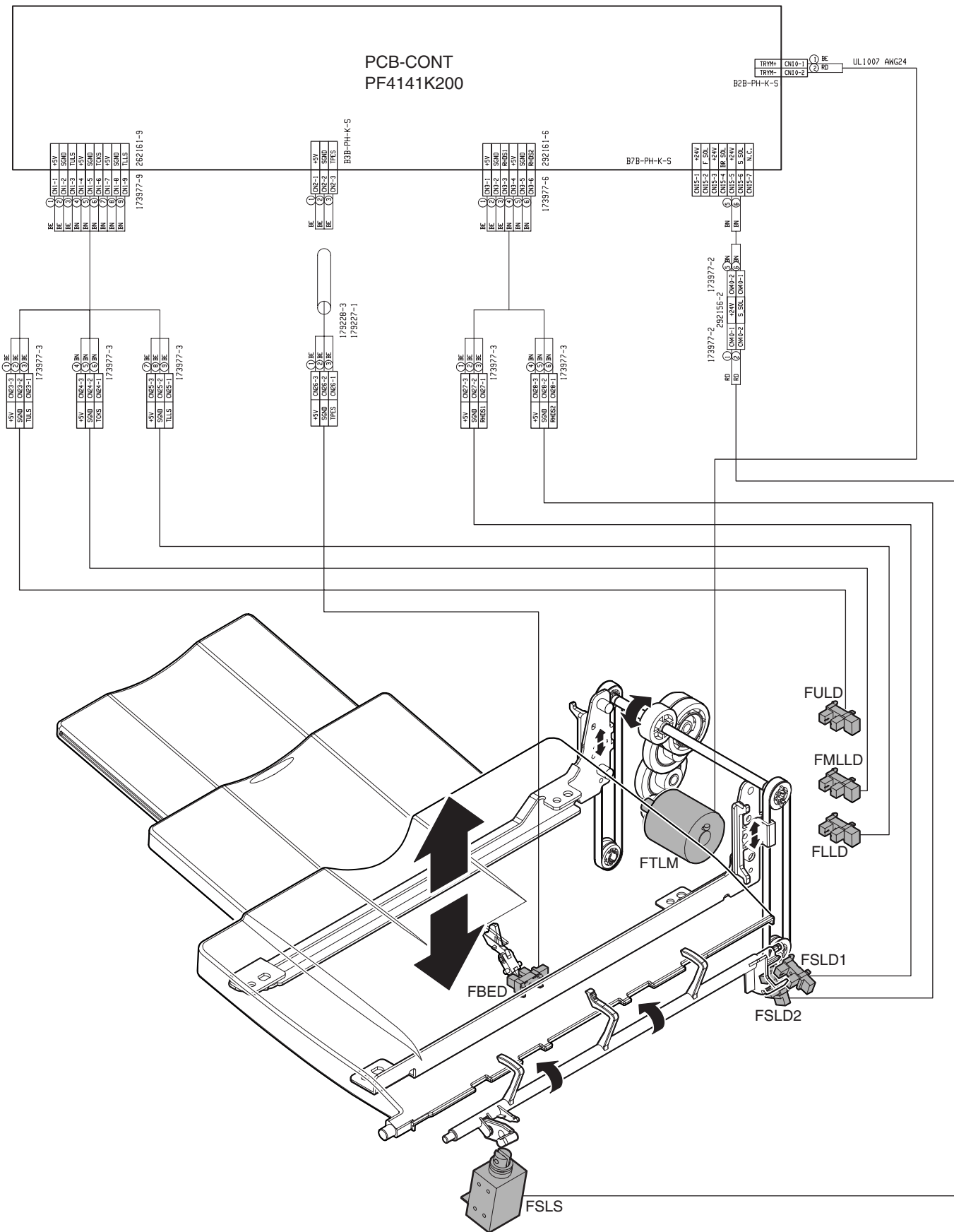


No.	Signal	Name	Function
1	FPNM	Punch motor	Drives the punch unit up/down.
2	FPSM	Punch horizontal resist motor	Shifts the punch unit to the center of paper.
3	–	Punch PWB	Controls the punch unit.
4	–	LED light emitting PWB	Detects the paper rear edge and the punch horizontal resist.
5	–	LED light receiving PWB	Detects the paper rear edge and the punch horizontal resist.

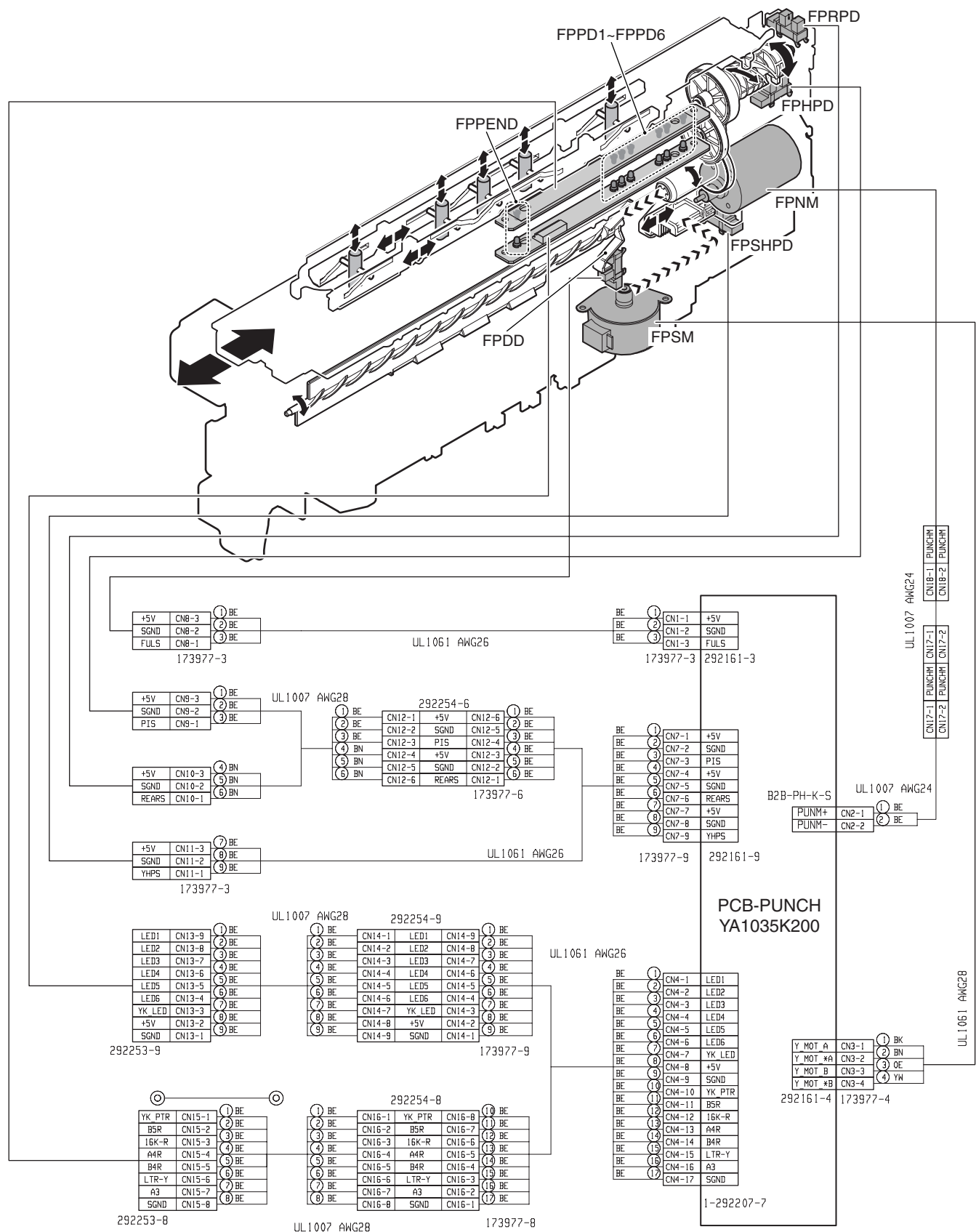
A. Transport, paper exit section



C. Paper exit tray section



D. Punch unit (MX-PNX1A/B/C/D)



2. General

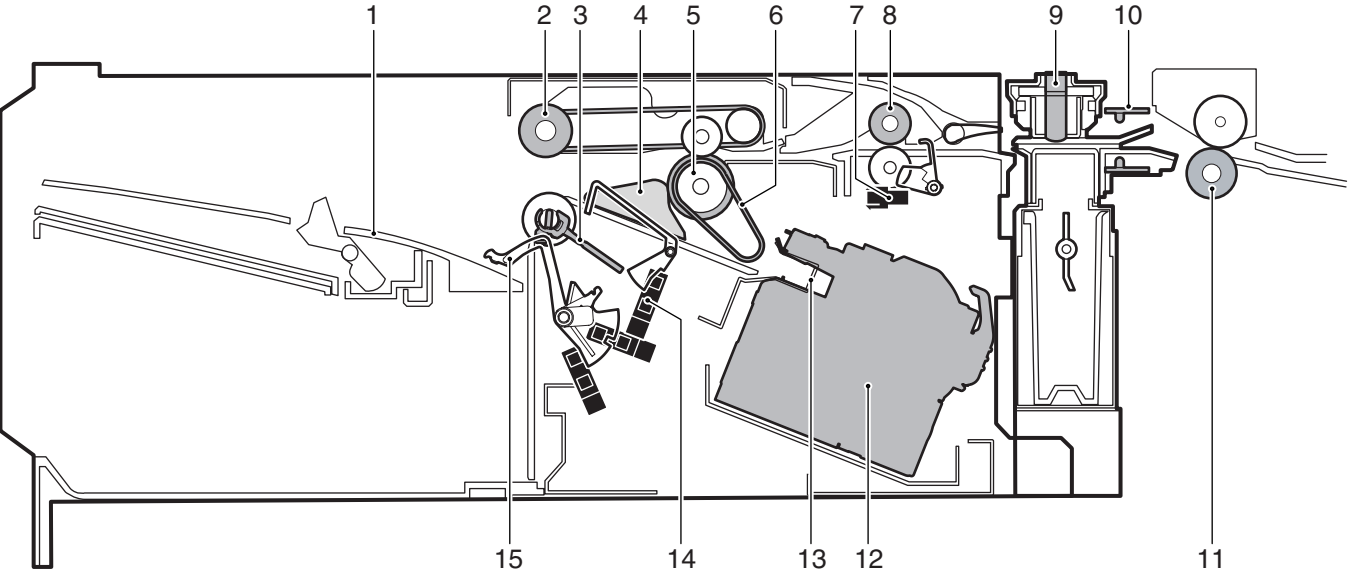
This chapter describes operations of the inner finisher. The major operation modes are as follows:

- Non-sort mode
- Offset mode
- Staple mode
- Non-sort mode + punch
- Offset mode + punch
- Staple mode + punch

In this chapter, the basic operations of the non-sort mode, the offset mode, and the staple mode are described.

3. Outline of the transport path

The outline of the path is shown below.



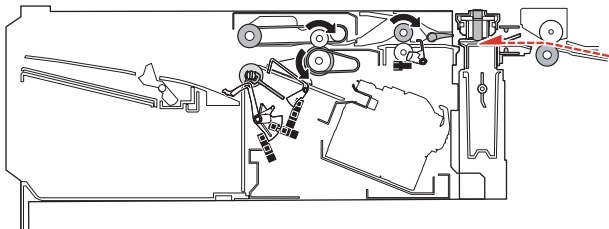
No.	Name	No.	Name
1	Tray	9	Punch pin
2	Bundle exit roller	10	Paper rear edge sensor (FPPEND)
3	Paddle	11	Main unit paper exit roller
4	Alignment plate	12	Stapler
5	Paper exit roller	13	Paper stopper
6	Take-up belt	14	Empty sensor (FSTPD)
7	Inlet port sensor (FED)	15	Paper holding lever
8	Inlet port roller		

4. Non-sort mode

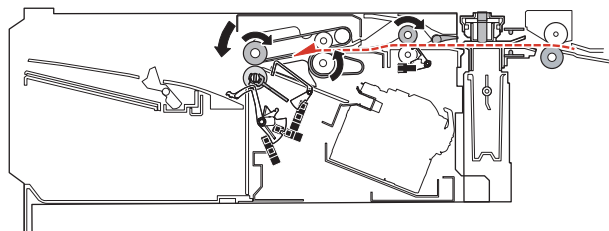
When the operation mode command is received from the copier, the finisher makes the finisher operation status command the JOB and starts the transport operation.

A. Reception of paper discharged from the main unit

- 1) The transport motor (FRM) is driven at the paper exit speed of the main unit to receive paper from the main unit.



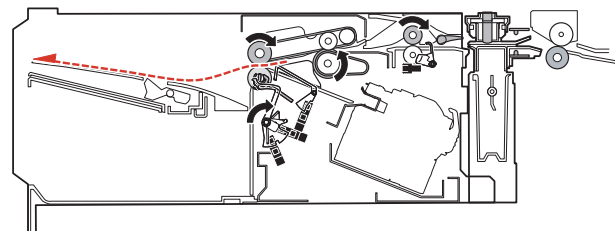
- 2) After turning ON the inlet port sensor (FED), the roller up/down motor (FSWM) is driven to lower the bundle exit roller. The bundle exit motor (FAM) is driven at the paper exit speed of the main unit to drive the bundle exit roller. When the paper width is 210mm or more, the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven by turning ON the inlet port sensor (FED) to shift the alignment plate to 15mm inside the paper and put it under the paper.
- 3) In the case of the punch mode, punching is performed as described in "7. Punching process."



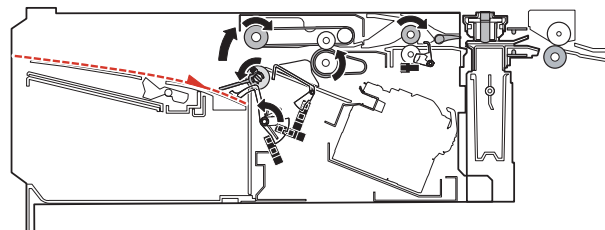
B. Paper exit

- 1) After the paper rear edge passes the paper exit roller of the main unit, the transport motor (FRM) and the bundle exit motor (FAM) are accelerated to 300mm/sec. When the paper rear edge passes the inlet port sensor (FED) and then transport of a certain amount is made, the alignment plate is shifted to the home position.

Before the paper rear edge passes the bundle exit roller, the paper surface detection solenoid (FSLs) is turned OFF and the bundle exit roller speed is decelerated to 100mm/sec at the same time, performing paper exit deceleration of paper.



- 2) Immediately after the paper rear edge passes the bundle exit roller, the paddle one-rotation solenoid (FPDS) is turned ON to take-up the paper falling onto the tray.
- 3) When paper is transported by 10mm after the paper rear edge passes the bundle exit roller, the bundle exit motor (FAM) is accelerated to 200mm/sec. Just before the paddle passes the load tray, the paper surface detection solenoid (FSLs) is turned ON to hold the paper discharged by the paper holding lever.



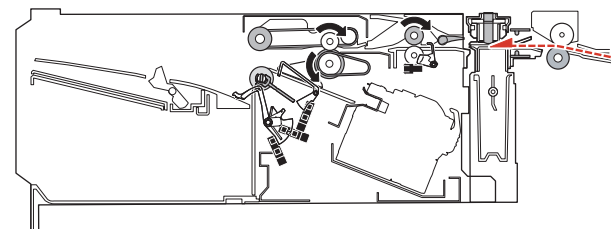
- 4) When the paddle rotates one turn, the bundle exit motor (FAM) is stopped.
- 5) When there is next paper, repeat the procedures from "A-1)."
- 6) When there is no next paper, the actuators are turned OFF and the finisher operation status command is set to READY, and the transport operation is terminated.

5. Offset mode

When the operation mode command is received from the copier, the finisher makes the finisher operation status command the JOB and starts the transport operation.

A. Reception of paper discharged from the main unit

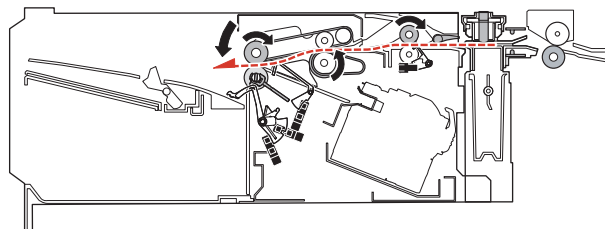
- 1) The transport motor (FRM) is driven at the paper exit speed of the main unit to receive paper from the main unit. When the paper length is 216mm or less, the paper exit speed of the second and later sheets from the main unit is 280mm/sec.



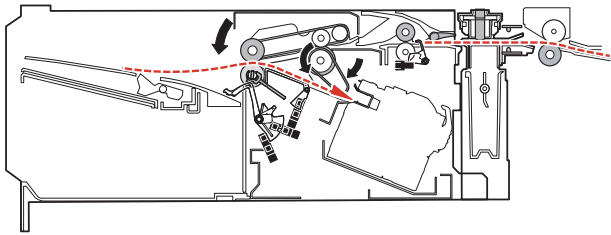
B. Paper take-up and alignment

- 1) For the first sheet of a bundle, the inlet port sensor (FED) is turned ON and the roller up/down motor (FSWM) is driven to lower the bundle exit roller. The bundle exit motor (FAM) is driven at the paper exit speed of the main unit to drive the bundle exit roller.

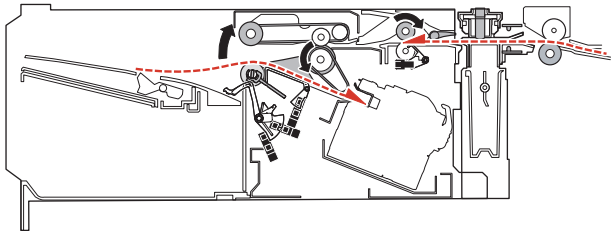
In addition, the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven by turning ON the inlet port sensor (FED) to shift the alignment plate to 15mm outside the paper, and enter the standby state. After transport of a certain amount, the roller up/down motor (FSWM) is driven to lift the bundle exit roller, stopping the bundle exit motor (FAM).



- 2) For the second and later sheets of a bundle, the inlet port sensor (FED) turns ON and a certain amount is transported, and then the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to shift the alignment plate to 15mm outside the paper and to put it under the standby state.
- 3) After the paper rear edge passes the paper exit roller of the main unit, the transport motor (FRM) is accelerated to 480mm/sec.
- 4) In the punch mode, punching is performed as described in "7. Punching process."
- 5) When the paper rear edge passes the inlet port sensor (FED) and a certain amount is transported, the roller up/down motor (FSWM) is driven to lower the bundle exit roller and the bundle exit motor (FAM) is driven for a certain amount in the take-up direction at the paper exit speed of the main unit to take up paper to the process tray. In addition, the belt separation solenoid (FBRs) is turned ON to lower the take-up belt.

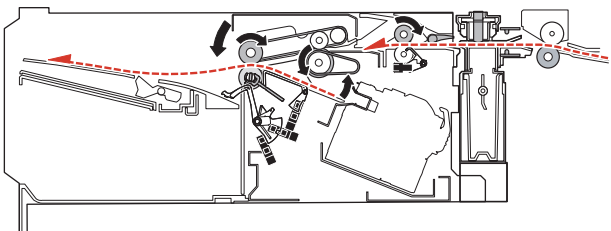


- 6) After completion of take-up, the roller up/down motor (FSWM) is driven to lift the bundle exit roller. The alignment motor F (FFJM) and the alignment motor R (FRJM) are driven for a certain amount to align paper in the process tray. If there are two or more sheets to be aligned, the procedures are repeated from "A-1)" for the specified number of sheets. However, the paper exit operation of "C. Aligned paper exit" is performed for every 3 sheets.

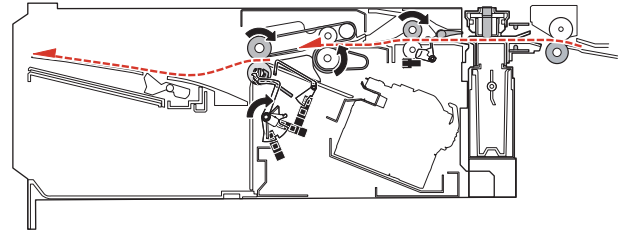


C. Aligned paper exit

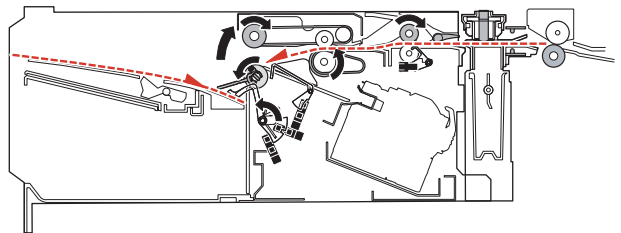
- 1) After completion of alignment, the belt separation solenoid (FBRs) is turned ON to lift the take-up belt. The alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to separate paper from the alignment plate by 1mm. In addition, the roller up/down motor (FSWM) is driven to lower the bundle exit roller. The bundle exit motor (FAM) is started at the speed of 450mm/sec and paper in the process tray is discharged.



- 2) After transport of paper by a certain amount, the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to shift the alignment plate to the home position.
- 3) When the paper rear edge passes the empty sensor (FSTPD), the paper surface detection solenoid (FSLs) is turned OFF and the bundle exit roller speed is decelerated to 100mm/sec at the same time, decelerating the paper exit operation.



- 4) Immediately after the paper rear edge passes the bundle exit roller, the paddle one-rotation solenoid (FPDS) is turned ON to take up paper falling onto the tray.
- 5) When the paper rear edge passes the bundle exit roller and the paper is transported for 10mm, the bundle exit motor (FAM) is accelerated to 200mm/sec. Before the paddle passes the load tray, the paper surface detection solenoid (FSLs) is turned ON to hold the discharged paper with the paper holding lever.



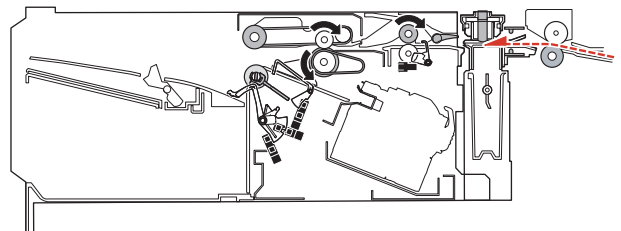
- 6) When the paddle rotates one turn, the bundle exit motor (FAM) is stopped.
- 7) When there is next paper, the procedures are repeated from "A-1)."
- 8) When there is no next paper, the actuators are turned OFF and the finisher operation status command is set to READY to terminate the transport operation.

6. Staple mode

When the operation mode command is received from the copier, the finisher makes the finisher operation status command the JOB and starts the transport operation.

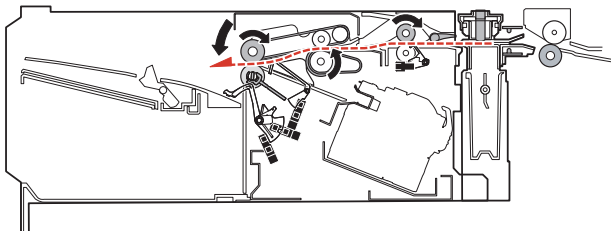
A. Reception of paper discharged from the main unit

- 1) The transport motor (FRM) is driven at the paper exit speed of the main unit to receive paper from the main unit. When the paper length is 216mm or less, the paper exit speed of the second and later sheets from the main unit is 280mm/sec.

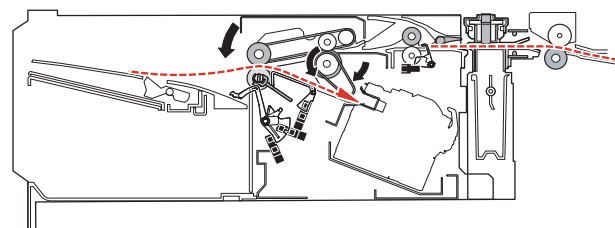


B. Paper take-up, alignment and staple

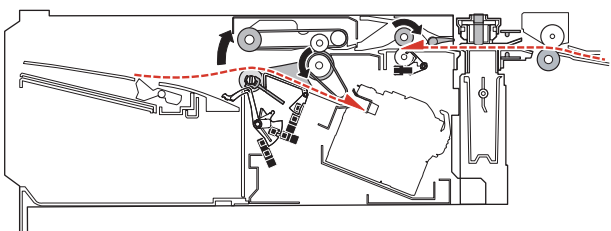
- 1) For the first sheet of a bundle, after turning on the inlet sensor (FED), the roller up/down motor (FSWM) is driven to lower the bundle exit roller. The bundle exit motor (FAM) is driven at the paper exit speed of the main unit to drive the bundle exit roller. By turning on the inlet port sensor (FED), the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to shift the alignment plate to 15mm outside the paper and to put it under the standby state. After transport of a certain amount, the roller up/down motor (FSWM) is driven to lift the bundle exit roller to terminate the bundle exit motor (FAM).



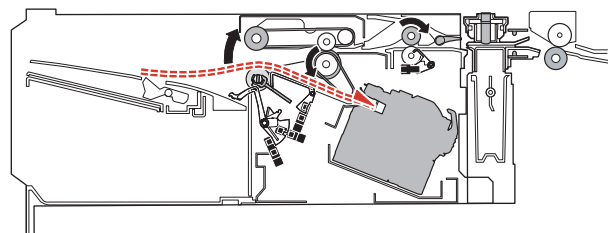
- 2) For the second and later sheets, after transporting paper from the inlet port sensor (FED) by a certain amount, the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to shift the alignment plate to 15mm outside the paper and to put it under the standby state.
- 3) For the last sheet of a bundle, the inlet port sensor (FED) is turned ON to drive the staple shift motor (FSM) to shift the stapler to the binding position.
- 4) After the paper rear edge passed the paper exit roller of the main unit, the transport motor (FRM) is accelerated to 480mm/sec.
- 5) In the punch mode, punching is performed as described in "7. Punching process."
- 6) When the paper rear edge passes the inlet port sensor (FED) and paper is transported by a certain amount, the roller up/down motor (FSWM) is driven to lower the bundle roller and the bundle exit motor (FAM) is driven in the take-up direction at the paper exit speed of the main unit by a certain amount to take up paper to the process tray. In addition, the belt separation solenoid (FBRs) is turned ON to lower the take-up belt.



- 7) After completion of take-up, the roller up/down motor (FSWM) is driven to lift the bundle exit roller. The alignment motor F (FFJM) and the alignment motor R (FRJM) are driven by a certain amount to align paper in the process tray. If there are two or more sheets to be aligned, the operation is repeated from "A-1)."

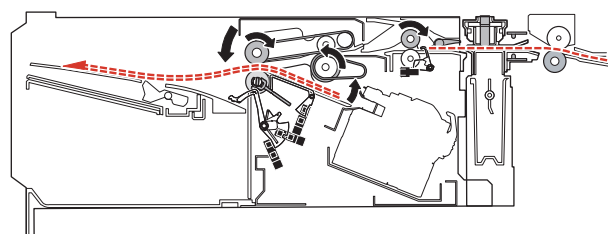


- 8) After completion of alignment of a specified number of sheets, the staple motor (FFSM) is started to staple at the specified position.

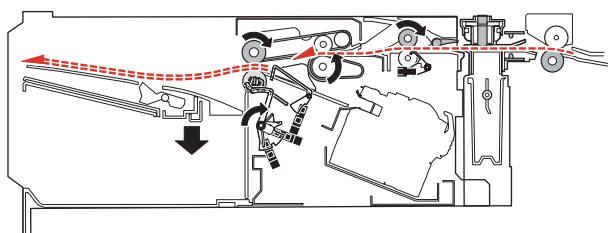


C. Aligned and stapled paper exit

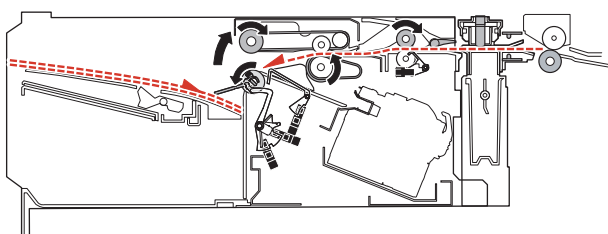
- 1) After completion of stapling, the belt separation solenoid (FBRs) is turned ON to lift the take-up belt. The alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to shift the alignment plate by 1mm from paper. Then the roller up/down motor (FSWM) is driven to lower the bundle exit roller to press, and the bundle exit motor (FAM) is started at 450mm/sec to discharge paper from the process tray.



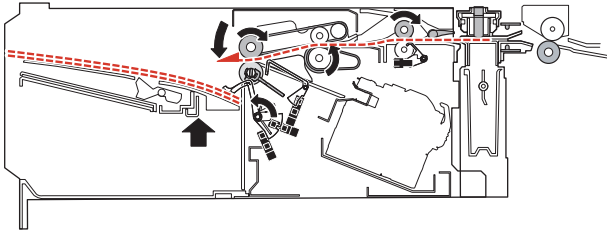
- 2) After transporting paper by a certain amount, the alignment motor F (FFJM) and the alignment motor R (FRJM) are driven to shift the alignment plate to the home position.
- 3) After the paper rear edge passes the empty sensor (FSTPD), the paper surface detection solenoid (FSLs) is turned OFF and the bundle exit roller speed is decelerated to 100mm/sec at the same time to decelerate paper exit of the paper bundle. At the same time, the roller up/down motor (FSWM) is driven in the lifting direction to decrease the pressure of the bundle roller. In addition, the tray motor (FTLM) is driven to lower the load tray by 5mm.



- 4) Immediately after the paper rear edge passes the bundle exit roller, the paddle one-rotation solenoid (FPDS) is turned ON to take up roller falling onto the tray.
- 5) When paper is transported by 10mm after the paper rear edge passes the bundle exit roller, the bundle exit motor (FAM) is decelerated to 200mm/sec.



- 6) When the paddle rotates one turn, the bundle exit motor (FAM) is stopped.
- 7) After the paddle rotates one turn, the paper surface detection solenoid (FSLs) is turned ON for 100msec and then OFF. Then it is turned ON after 400msec. At that time, if the paper surface level is lower than the reference level, the tray motor (FTLM) is driven to lift the load tray to the reference level.



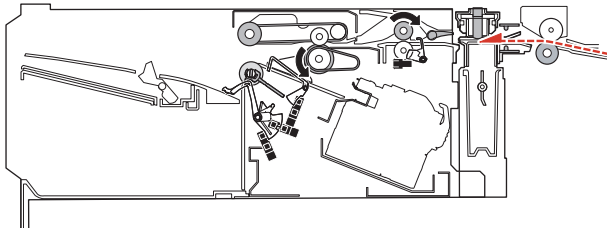
- 8) If there is next paper, the operation is repeated from "A-1)."
- 9) If there is no next paper, the actuators are turned OFF and the finisher operation status command is set to READY state, and the transport operation is terminated.

7. Punching process

When the operation mode command is received from the copier, the finisher makes the finisher operation status command the JOB and starts the transport operation.

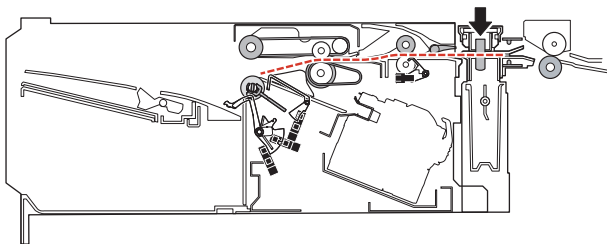
A. Reception of paper discharged from the main unit

- 1) The transport motor (FRM) is driven at the paper exit speed of the main unit to receive paper from the main unit. When the paper length is 216mm or less in the offset mode or in the staple mode, the paper exit speed of the second and later sheets of the same bundle from the main unit is 280mm/sec.



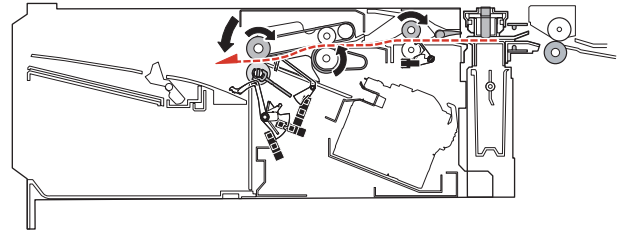
B. Punching process 1

- 1) When the paper rear edge passes the paper rear edge sensor, the transport motor (FRM) is stopped and paper transport is stopped.
- 2) When the paper is stopped, the punch motor (FPNM) is driven to punch at the paper rear edge.



C. Punching process 2

- 1) After completion of punching, the transport motor (FRM) and the bundle exit motor (FAM) are driven to transport paper and the specified after-process is executed. The motor speed is 300mm/sec for the non-sort mode, and 480mm/sec for the off-set mode or the staple mode.



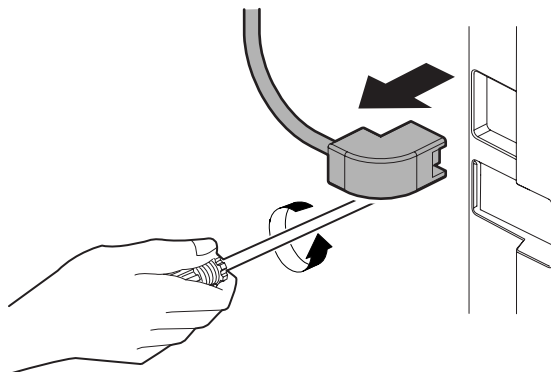
[6] DISASSEMBLY AND ASSEMBLY

1. MX-FNX1

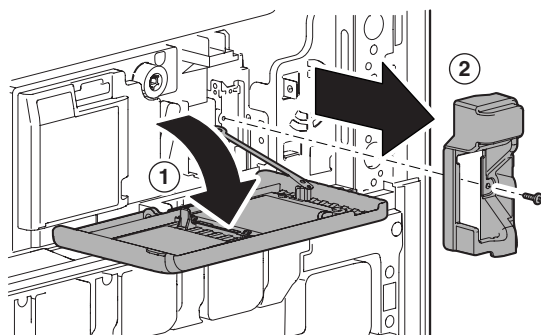
A. Exterior

(1) Inner finisher

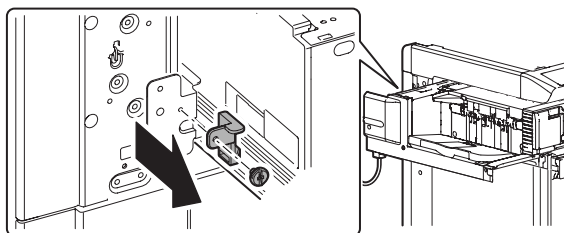
- 1) Loosen the screw, and disconnect the connector from the main unit.



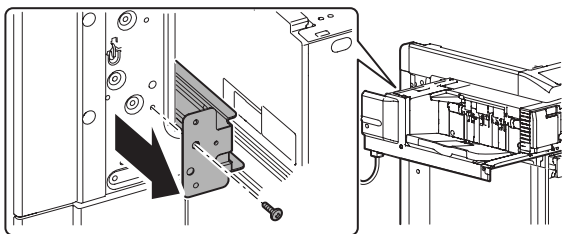
- 2) Open the front cover, and remove the punch unit cover.



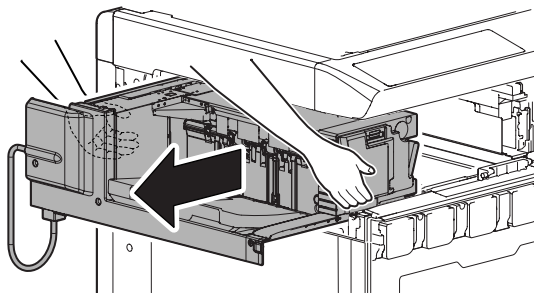
- 3) Remove the stopper.



- 4) Remove the screw, and remove the rail stay.

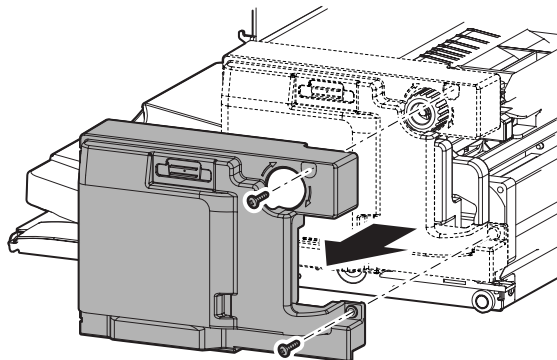


- 5) Remove the inner finisher from the main unit.



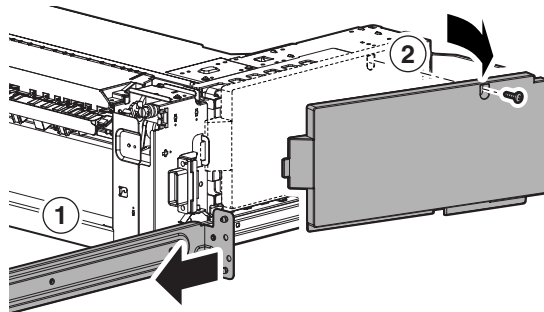
(2) Inner cover

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover.



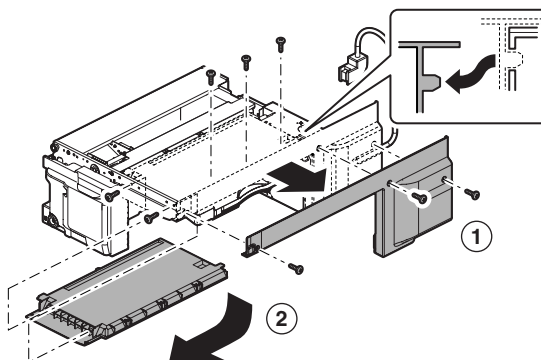
(3) Rear cover

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Slide the rail, and remove the rear cover.



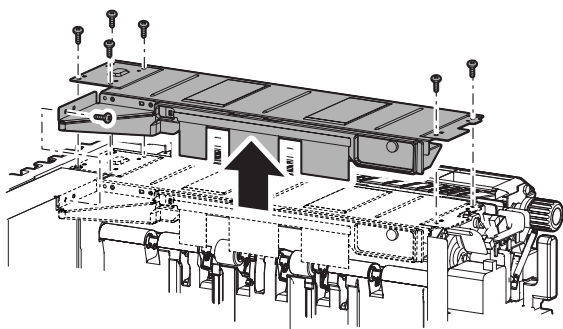
(4) Left cover, bottom cover

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the left cover and the bottom cover.



(5) Reverse guide unit

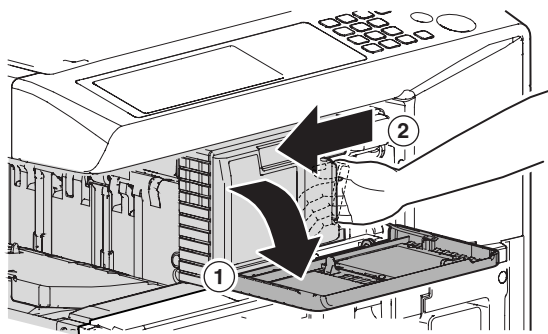
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the reverse guide unit.



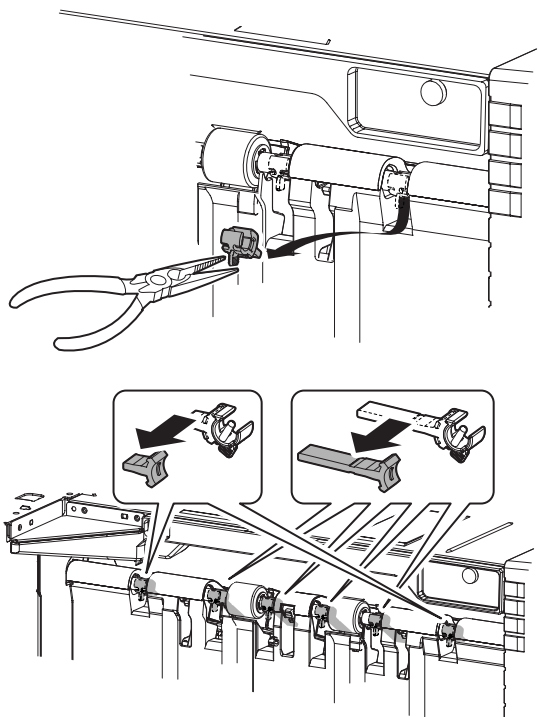
B. Transport section, paper exit section

(1) Paddle

- 1) Open the front cover, and slide the inner finisher.

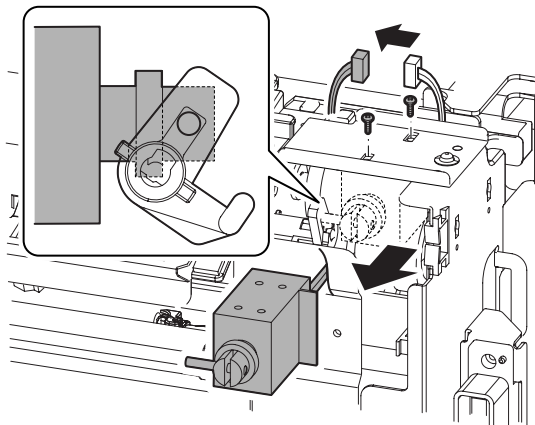


- 2) Remove the paddle holders, and remove the paddles.

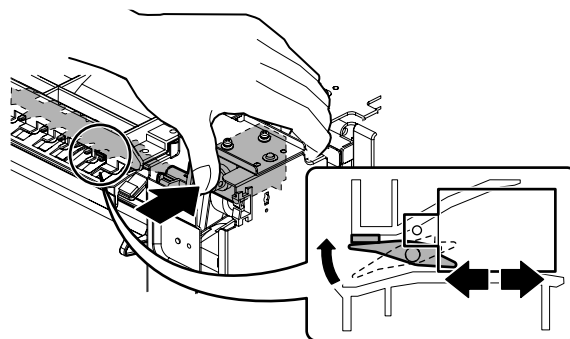


(2) Flapper solenoid

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Disconnect the connector, and remove the flapper solenoid.

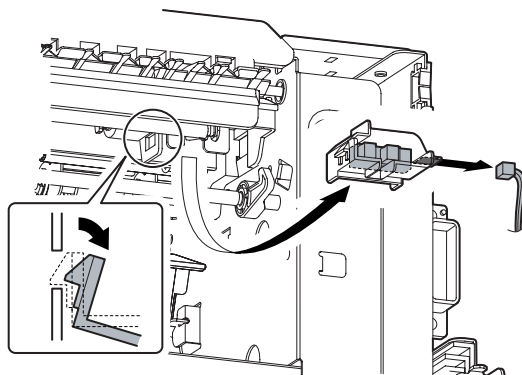


* When installing, shift and fix the solenoid so that the reverse flapper and the cushion material are in contact with each other with the solenoid plunger pushed in.



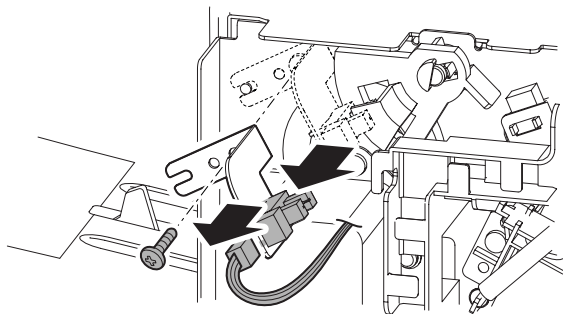
(3) Inlet port sensor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the sensor holder, and remove the inlet port sensor.



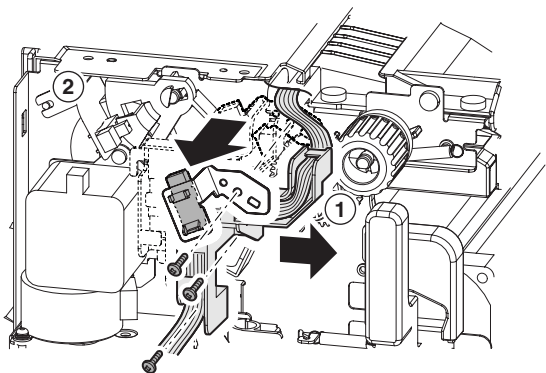
(4) Roller up/down sensor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the bracket, and remove the roller up/down sensor.



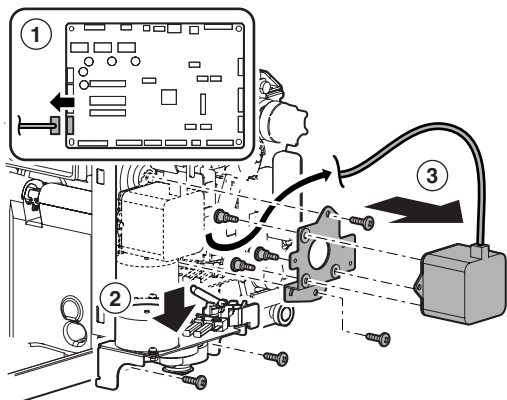
(5) Take-up belt sensor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Slide the harness guide, remove the bracket, and remove the take-up belt sensor.



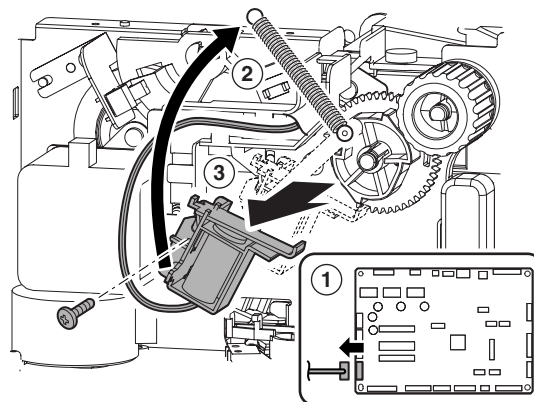
(6) Roller up/down motor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the rear cover. Refer to A-(3).
- 4) Remove the reverse guide unit.
- 5) Slide the stapler drive unit. Disconnect the connector from the PWB. Remove the roller up/down motor unit. Remove the roller up/down motor.



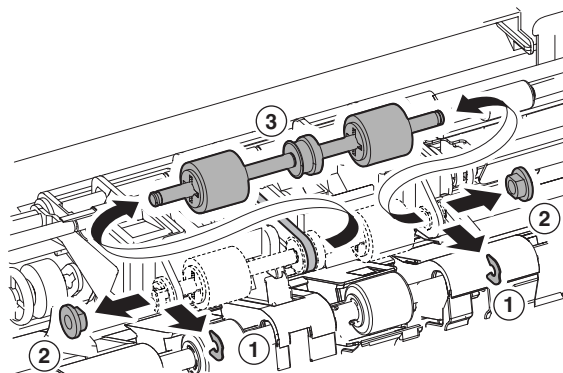
(7) Belt separation solenoid

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the reverse guide unit. Refer to A-(5).
- 4) Remove the parts, and remove the belt separation solenoid.

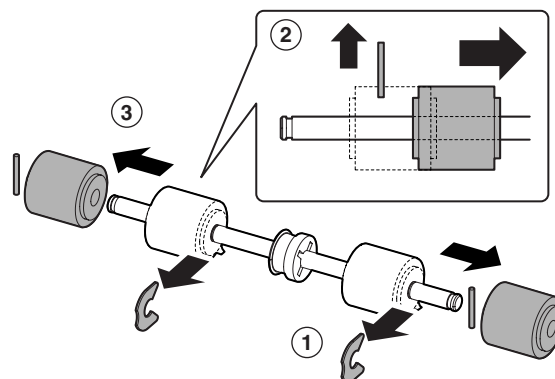


(8) Bundle exit paper transport roller

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the reverse guide unit. Refer to A-(5).
- 4) Remove the parts, and remove the bundle exit paper transport roller unit.

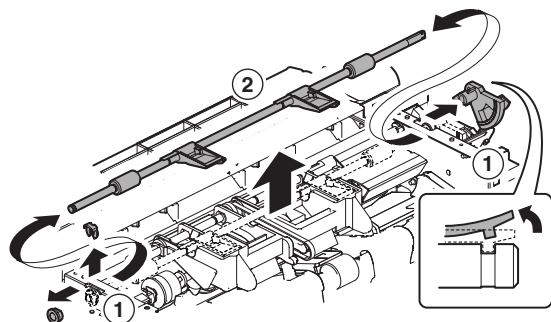


- 5) Remove the parts, and remove the bundle exit paper transport roller.

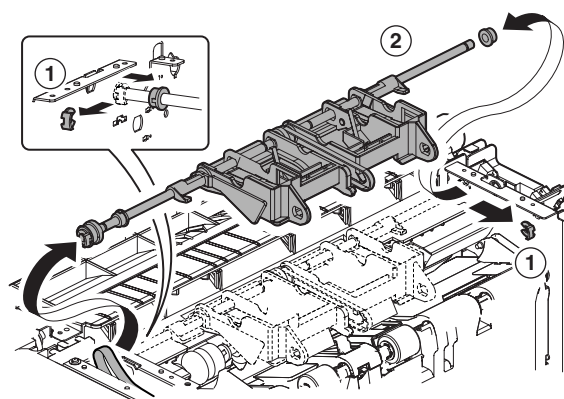


(9) Take-up belt, paper exit roller

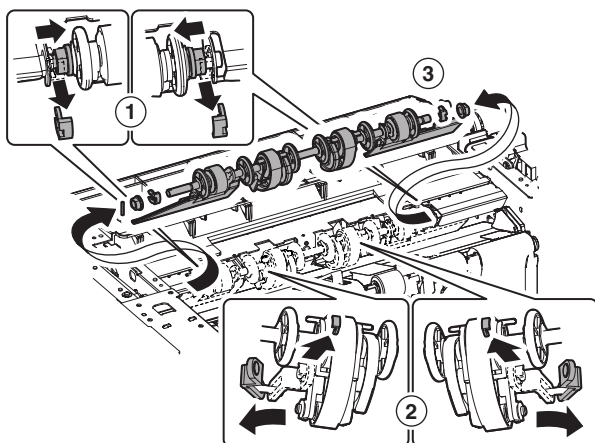
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the reverse guide unit. Refer to A-(5).
- 4) Remove the parts, and remove the bundle roller up/down lever unit.



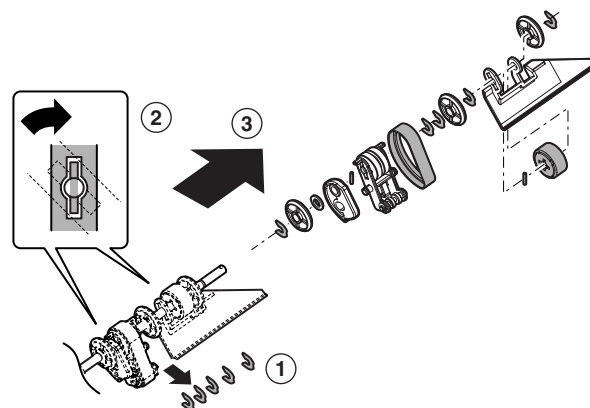
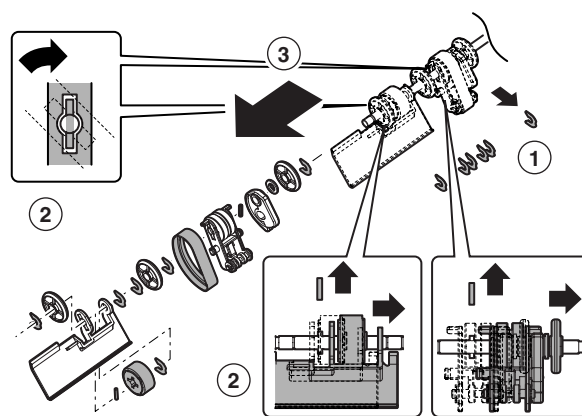
- 5) Remove the parts, and remove the bundle roller unit.



- 6) Remove the parts, and pull out the belt unit. Remove the parts, and remove the belt unit.

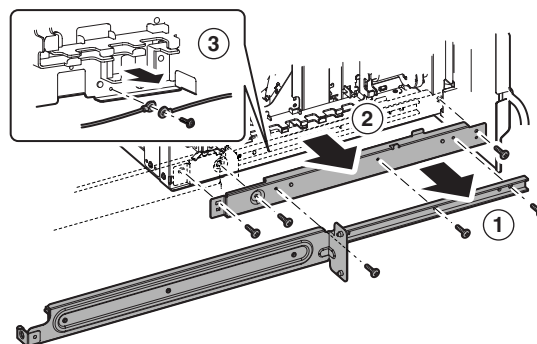


- 7) Remove the parts, and remove the take-up belt and the paper exit roller.

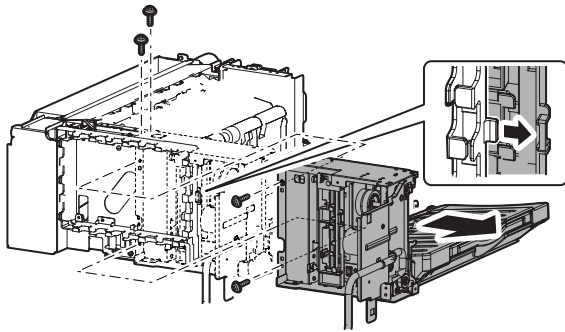


(10) Inlet port gate

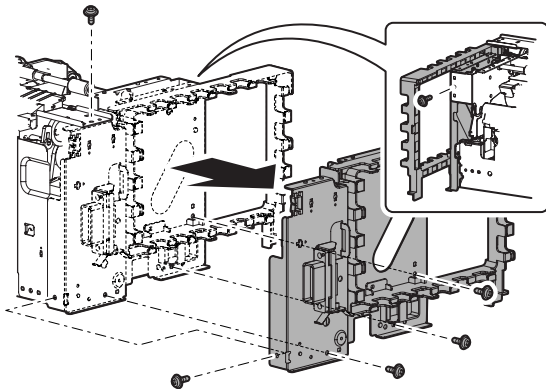
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the left cover and the bottom cover. Refer to A-(4).
- 4) Remove the reverse guide unit. Refer to A-(5).
- 5) Remove the PWB. Refer to F-(1).
- 6) Remove the flapper solenoid. Refer to B-(2).
- 7) Remove the slide rail. Remove the slider fixing bracket and remove the earth terminal.



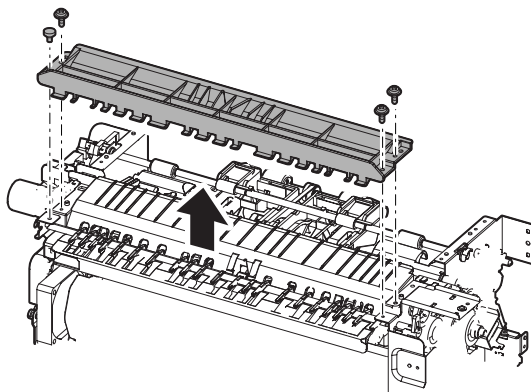
- 8) Remove the tray unit.



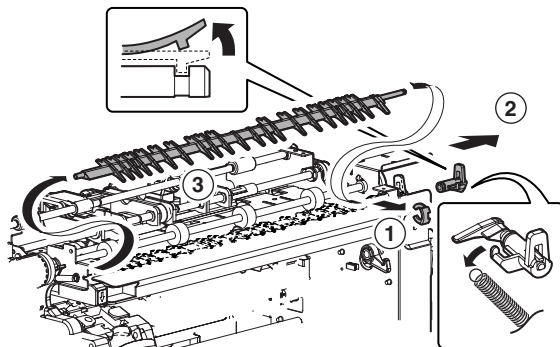
- 9) Remove the harness from the guide, and remove the bottom plate.



- 10) Remove the inlet port upper guide.

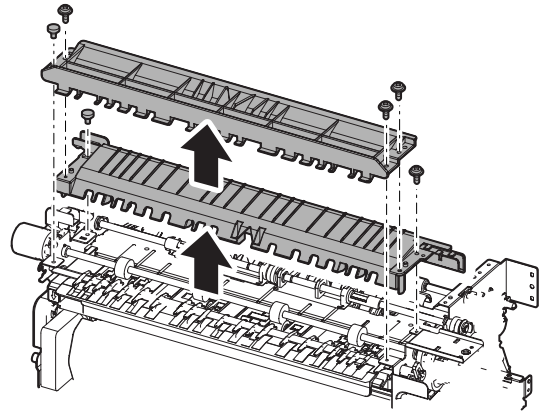


- 11) Remove the spring, and remove the parts. Remove the inlet port gate.

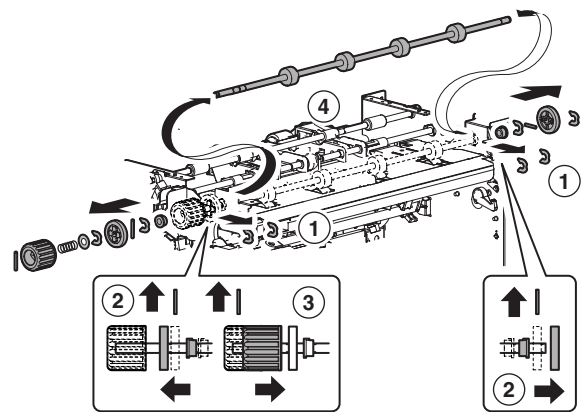


(11) Inlet port paper transport roller

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the bottom plate. Refer to B-(10).
- 5) Remove the inlet port upper guide, and remove the transport guide.

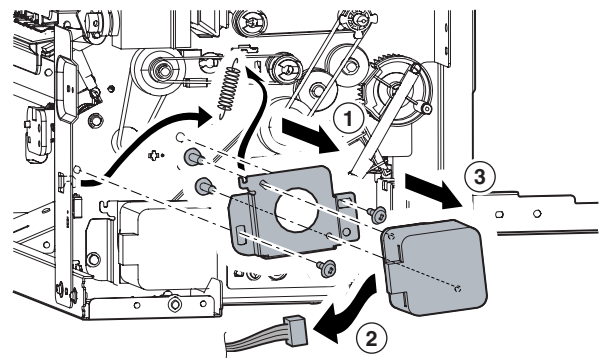


- 6) Remove the parts, and remove the inlet port paper transport roller.



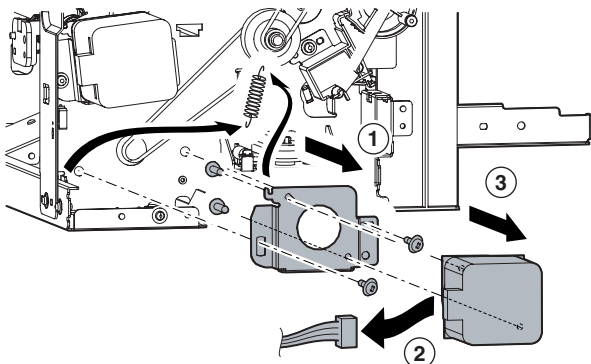
(12) Transport motor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the bottom plate. Refer to B-(10).
- 5) Disconnect the connector, and remove the transport motor.



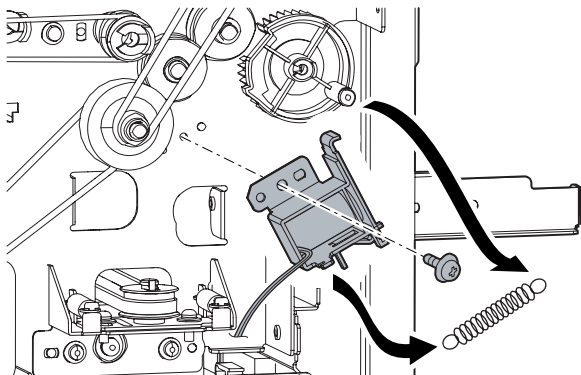
(13) Bundle exit motor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the bottom plate. Refer to B-(10).
- 5) Disconnect the connector, and remove the bundle exit motor.



(14) Paddle one-rotation solenoid

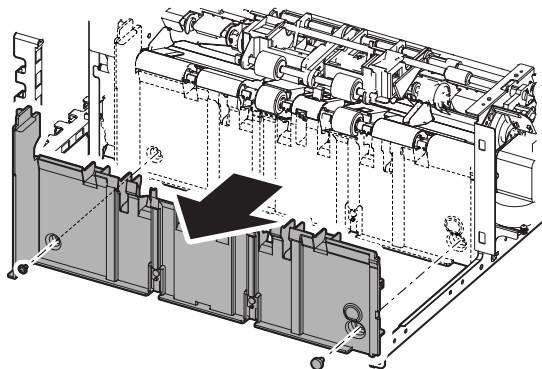
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the bottom plate. Refer to B-(10).
- 5) Remove the paddle one-rotation solenoid.



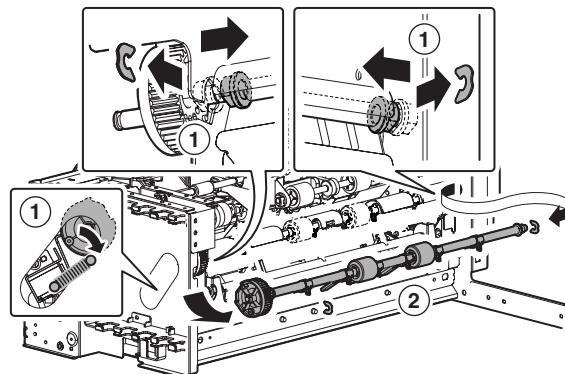
C. Process tray section

(1) Alignment motors F and R

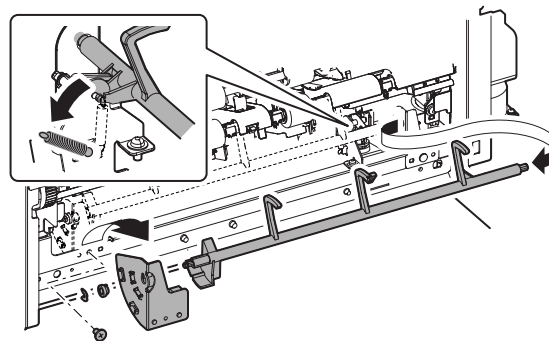
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the load cover. Refer to B-(10).



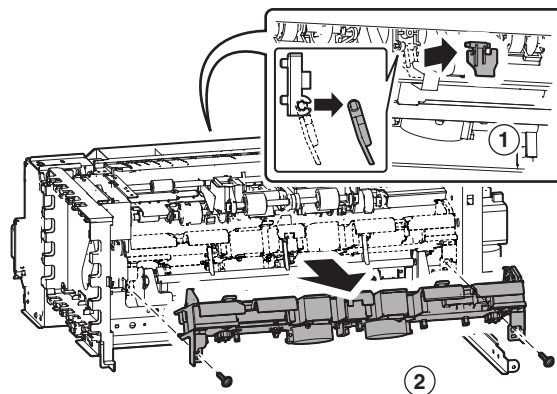
- 5) Remove the bundle exit paper transport unit.



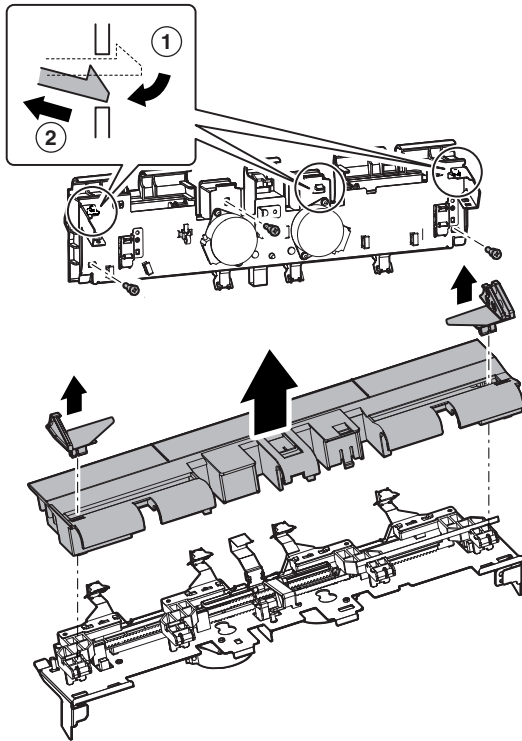
- 6) Remove each parts, and remove the sensor lever.



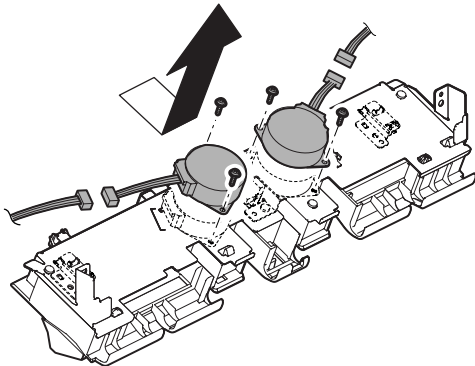
- 7) Remove the center weight, and remove the process tray unit.



- 8) Remove the alignment plate. Remove the screws and the pawl, and remove the process tray.

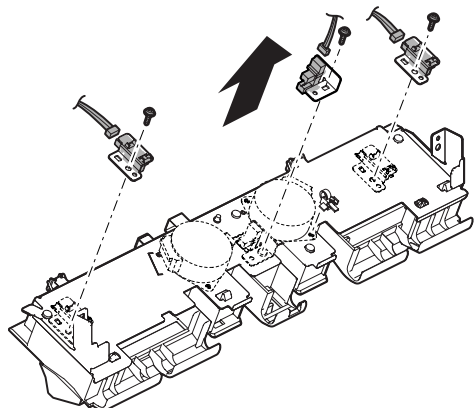


- 9) Slide the unit and remove the alignment motors F and R.



(2) Empty sensor, alignment plate HP sensors F and R

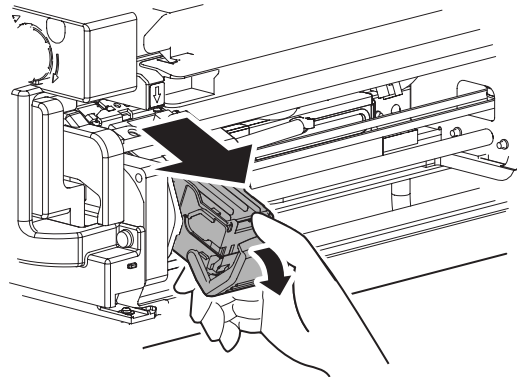
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the process tray unit. Refer to C-(1).
- 5) Remove the bracket and the empty sensor. Remove the alignment plate HP sensors F and R.



D. Staple section

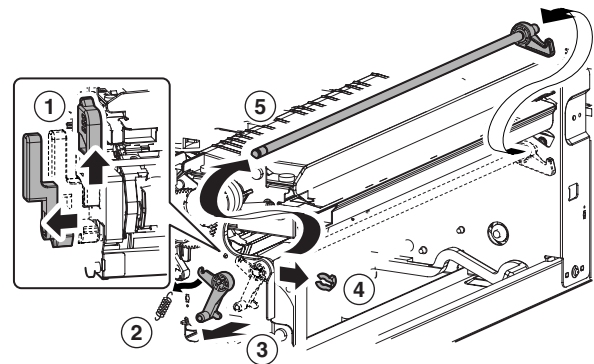
(1) Staple cartridge

- 1) Open the front cover, and slide the inner finisher. Refer to B-(1).
- 2) Release the lock, and remove the staple cartridge.

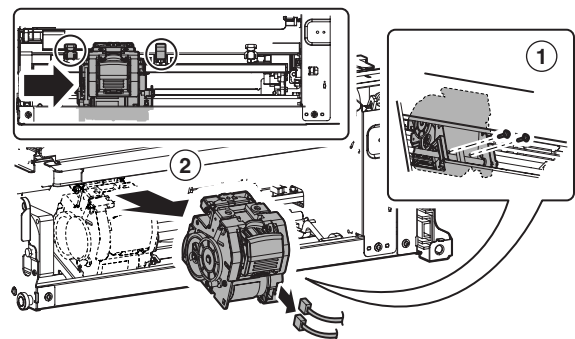


(2) Staple unit

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the latch cover. Remove the parts and the shaft.

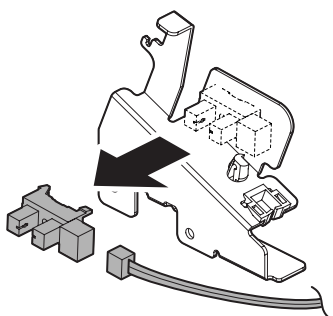
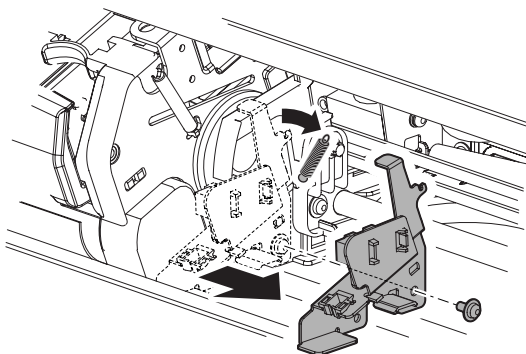


- 4) Remove the screw from the bottom. Remove the staple unit, and disconnect the connector.



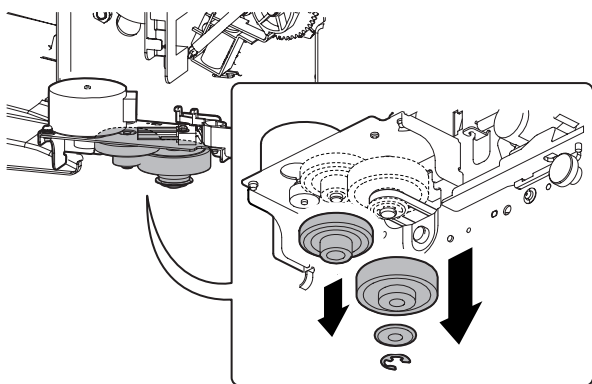
(3) Alignment plate position sensor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Shift the staple unit to the front side.
- 3) Remove the bracket and remove the position sensor.

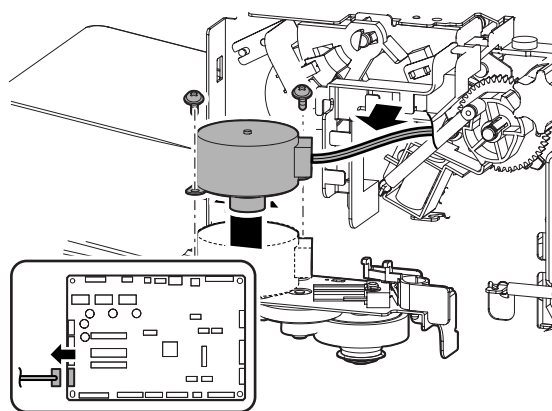


(4) Staple shift motor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the rear cover. Refer to A-(3).
- 4) Remove the reverse guide unit. Refer to A-(5).
- 5) Remove the roller up/down motor. Refer to B-(6).
- 6) Remove the E-ring, the flange and the gear pulley, and remove the gear.

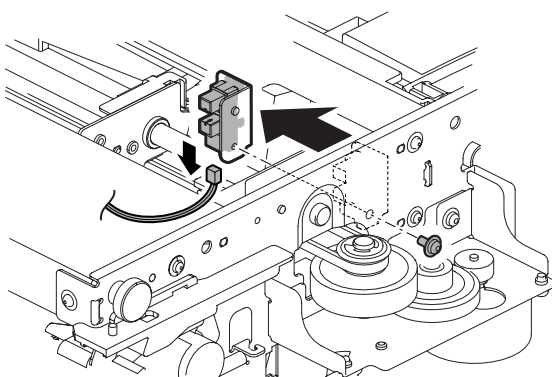


- 7) Disconnect the connector from the PWB, and remove the staple shift motor.



(5) Stapler HP sensor

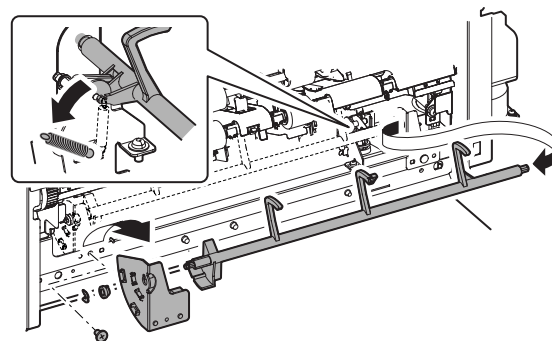
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Put the inner finisher upside down, and remove the stapler HP sensor.



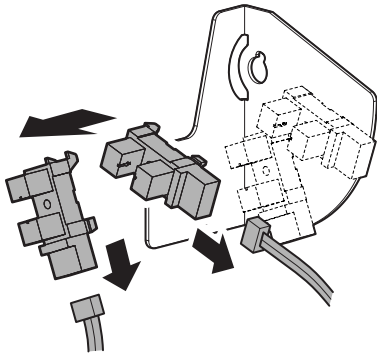
E. Paper exit tray section

(1) Paper surface sensors 1, 2

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the load cover. Refer to C-(1).
- 5) Remove the parts, and remove the sensor lever.

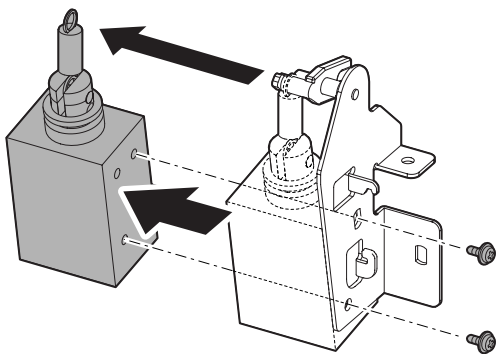
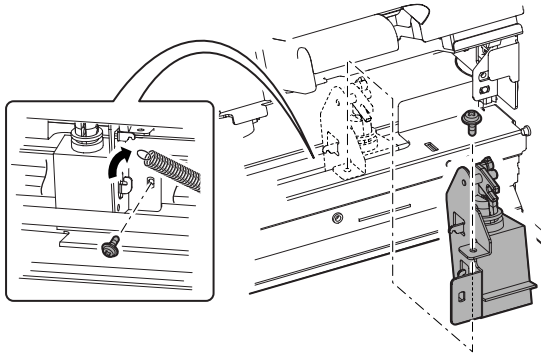


- 6) Remove the bracket, and remove the paper surface sensors 1, 2.



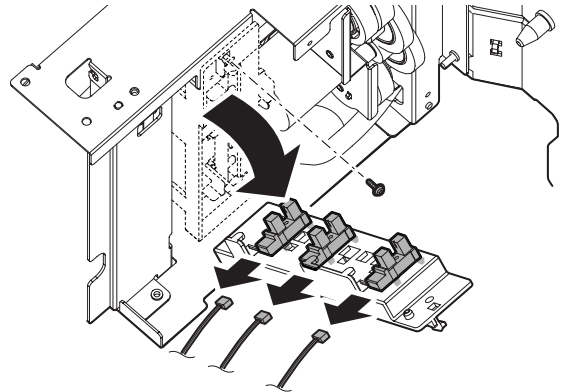
(2) Paper surface detection solenoid

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the tray unit. Refer to B-(10).
- 4) Remove the bundle exit paper transport roller unit, the sensor lever, the process tray unit. Refer to C-(1).
- 5) Remove the paper surface detection solenoid unit, and remove the paper surface detection solenoid.



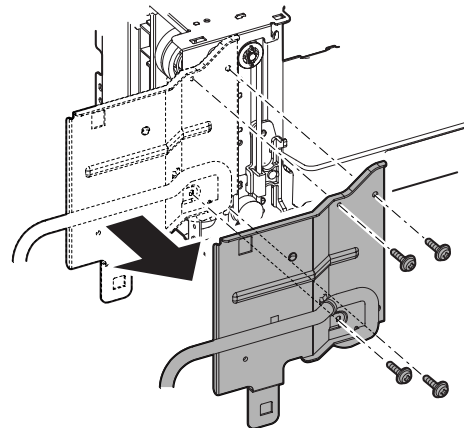
(3) Tray upper limit sensor, tray intermediate lower limit sensor, tray lower limit sensor

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the tray unit. Refer to B-(10).
- 3) Remove the harness guide, and remove the tray upper limit sensor, the tray intermediate lower limit sensor, and the tray lower limit sensor.

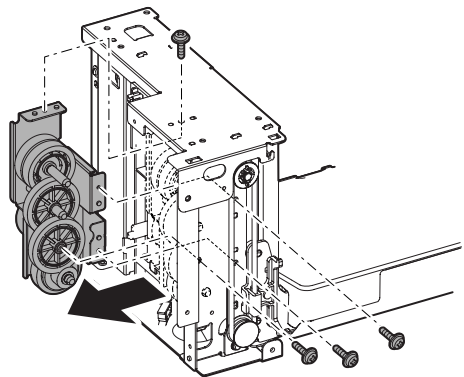


(4) Tray motor

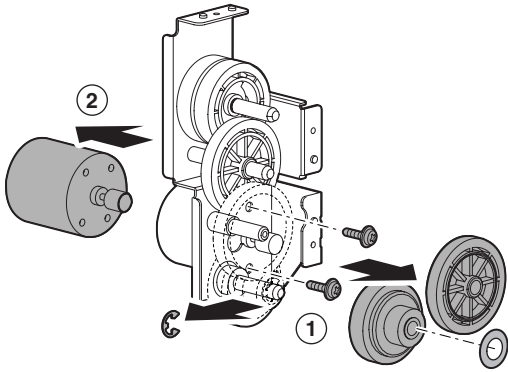
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the tray unit. Refer to B-(10).
- 3) Remove the tray left bracket and the tray drive unit.



- 4) Remove the tray drive unit.

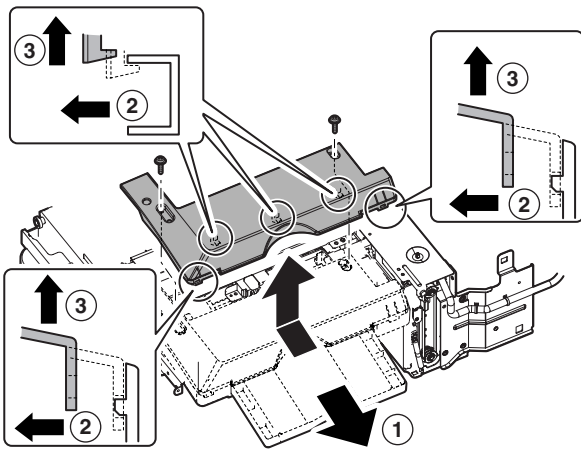


- 5) Remove the gear, and remove the tray motor.

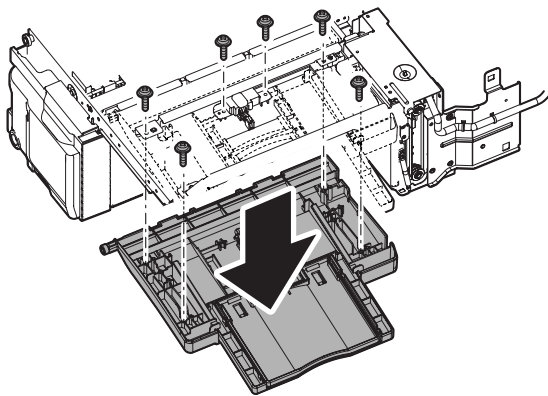


(5) Tray paper empty sensor

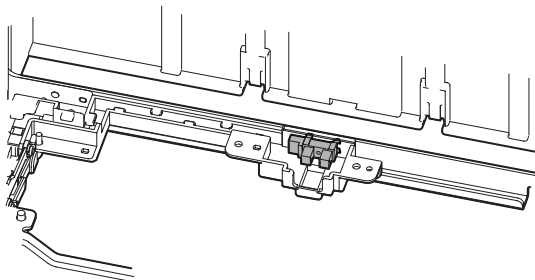
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the left cover and the bottom cover. Refer to A-(4).
- 3) Remove the tray bottom cover.



- 4) Pull out the tray. Remove the screw, and remove the tray.



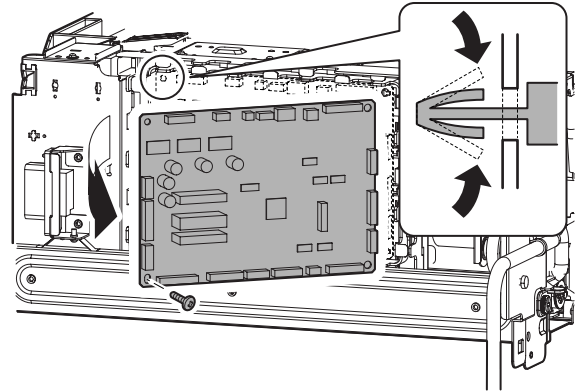
- 5) Remove the tray paper empty sensor.



F. Others

(1) Control PWB

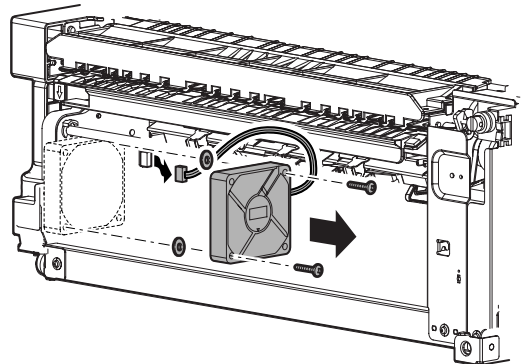
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the rear cover. Refer to A-(3).
- 3) Disconnect the connector, and remove the screw. Remove the PWB support and remove the control PWB.



(2) Fan

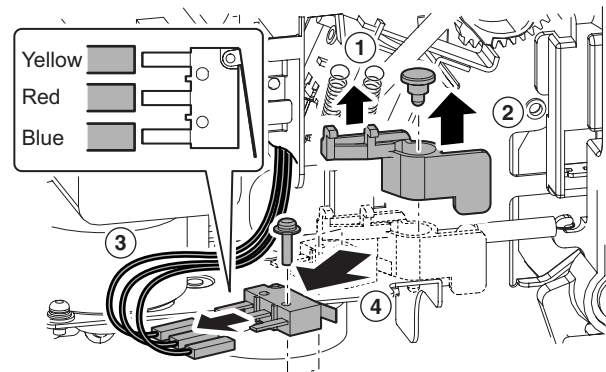
- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Shift the staple unit to the rear side. Disconnect the connector and remove the fan.

* When installing, take care that the label of the fan comes to the direction illustrated.



(3) Front cover switch

- 1) Remove the inner finisher from the main unit. Refer to A-(1).
- 2) Remove the inner cover. Refer to A-(2).
- 3) Remove the spring, and remove the interlock sensor lever. Remove the front cover switch, and disconnect the connector.

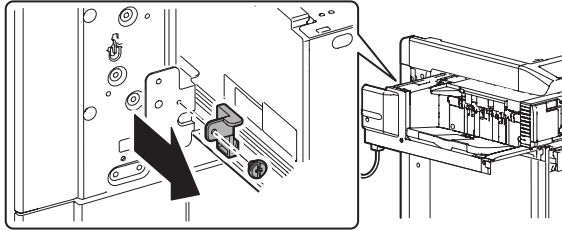


2. MX-PNX1A/B/C/D

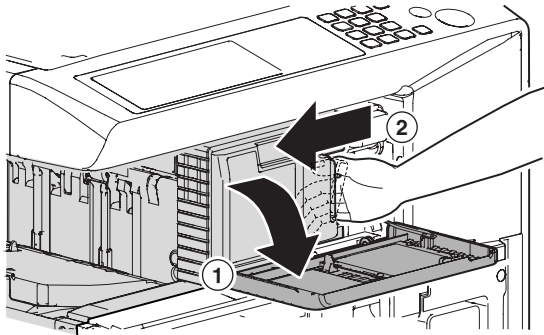
A. Punch unit (MX-PNX1A/B/C/D)

(1) Punch unit (MX-PNX1A/B/C/D)

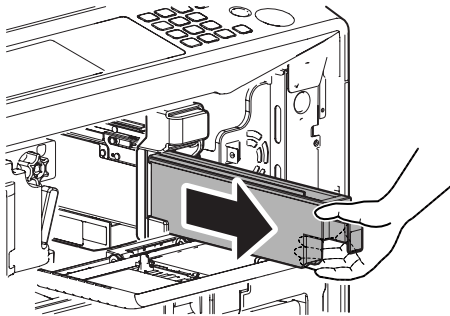
- 1) Remove the coin screw, and remove the finisher slide stopper.



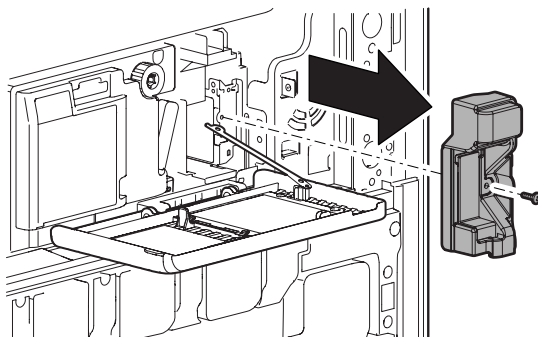
- 2) Open the front cover, and slide the inner finisher.



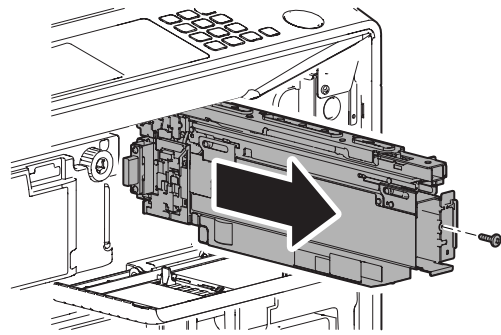
- 3) Remove the dust box.



- 4) Remove the punch cover.

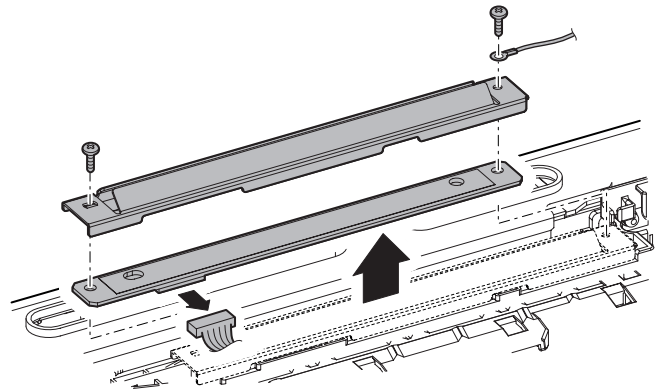


- 5) Remove the punch unit from the main unit.



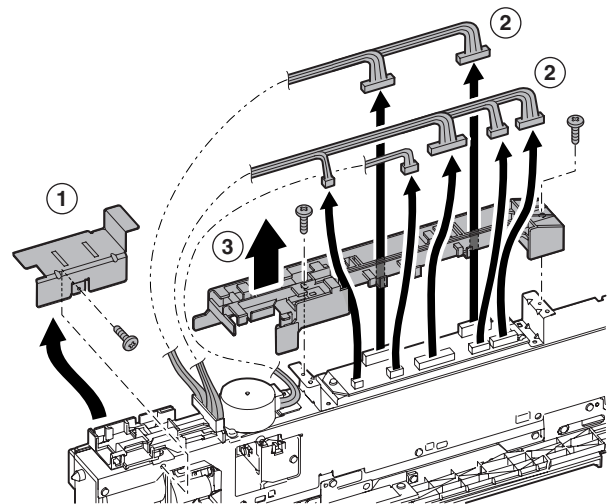
(2) LED light receiving PWB

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the PWB holder, and remove the LED light receiving PWB.

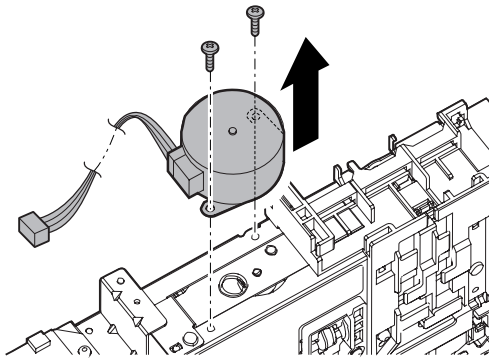


(3) Punch horizontal resist motor

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the guide cover. Disconnect the connector, and remove the harness guide.

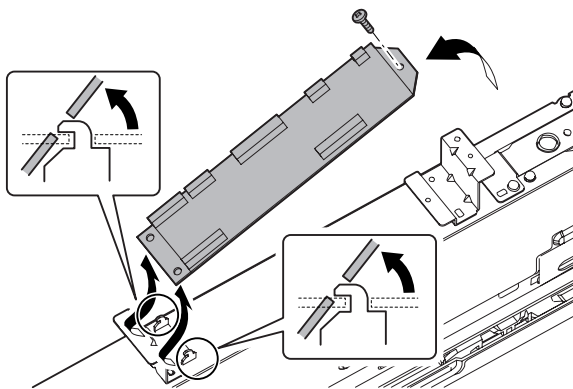


- 3) Remove the punch horizontal resist motor.



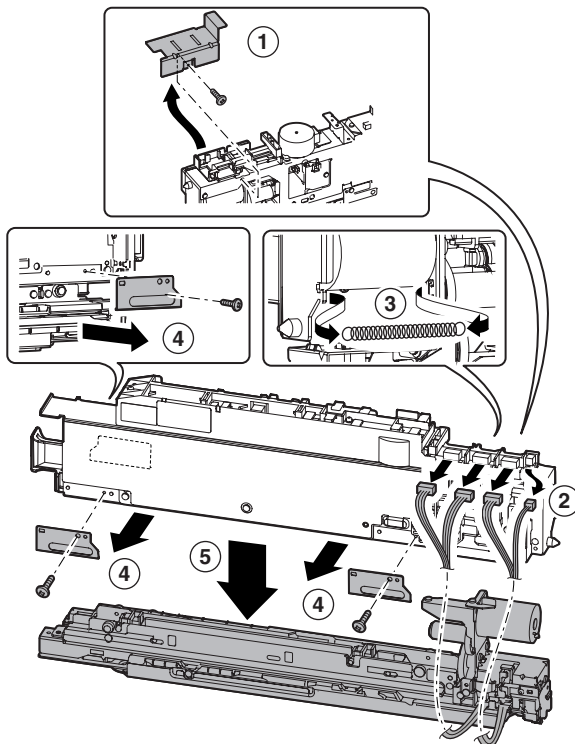
(4) Punch PWB

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the guide cover and the harness guide. Refer to A-(3).
- 3) Remove the punch PWB.

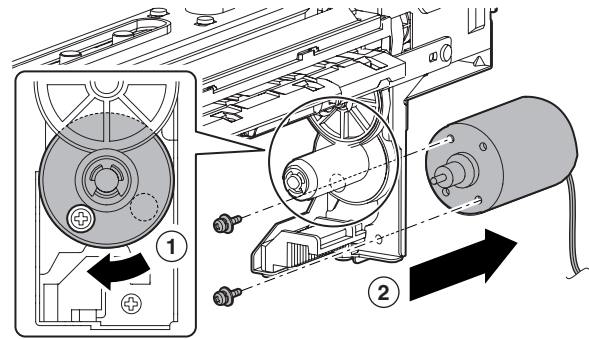


(5) Punch motor

- 1) Remove the punch unit. Refer to A-(1).
- 2) Disconnect the connector, and remove the link plate. Remove the spring, and separate the upper unit and the lower unit.

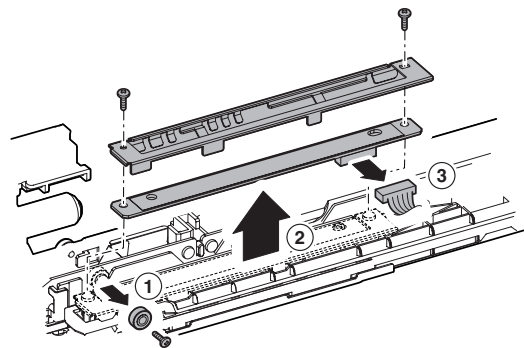


- 3) Fit the gear hole with the screw position, and remove the screw. Remove the punch motor.



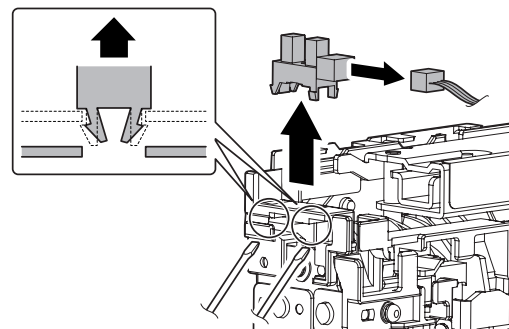
(6) LED light emitting PWB

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the lower unit. Refer to A-(5).
- 3) Remove the roller and the PWB holder. Remove the LED light emitting PWB.



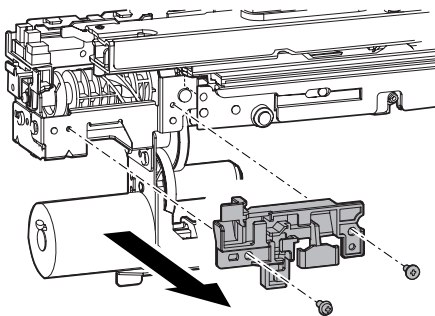
(7) Rear position sensor

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the rear position sensor.

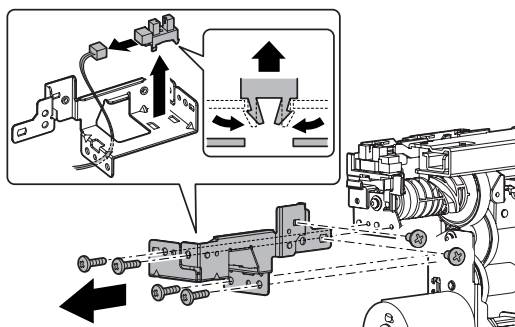


(8) Punch position sensor

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the upper unit. Refer to A-(5).
- 3) Remove the harness guide.

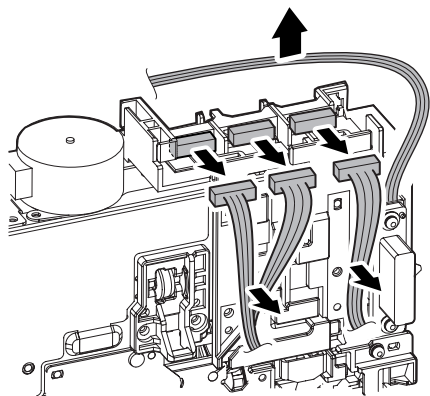


- 4) Remove the punch position sensor.

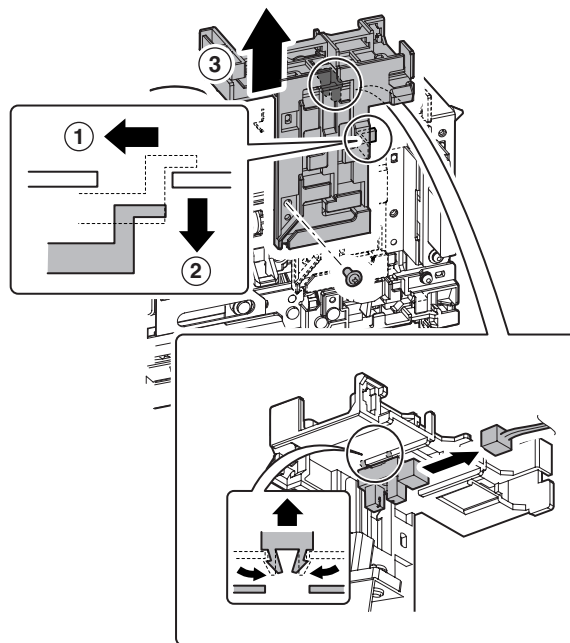


(9) Horizontal shift HP sensor

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the guide cover and the harness guide. Refer to A-(3).
- 3) Disconnect the connector, and remove the harness.

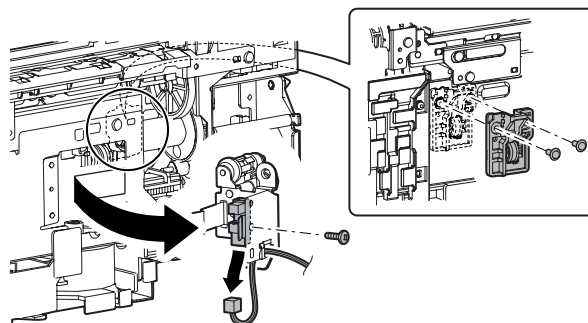


- 4) Remove the screws and the pawl, and lift up the harness guide. Disconnect the connector, and remove the horizontal shift HP sensor.



(10) Full sensor

- 1) Remove the punch unit. Refer to A-(1).
- 2) Remove the drive bracket, and remove the full sensor.

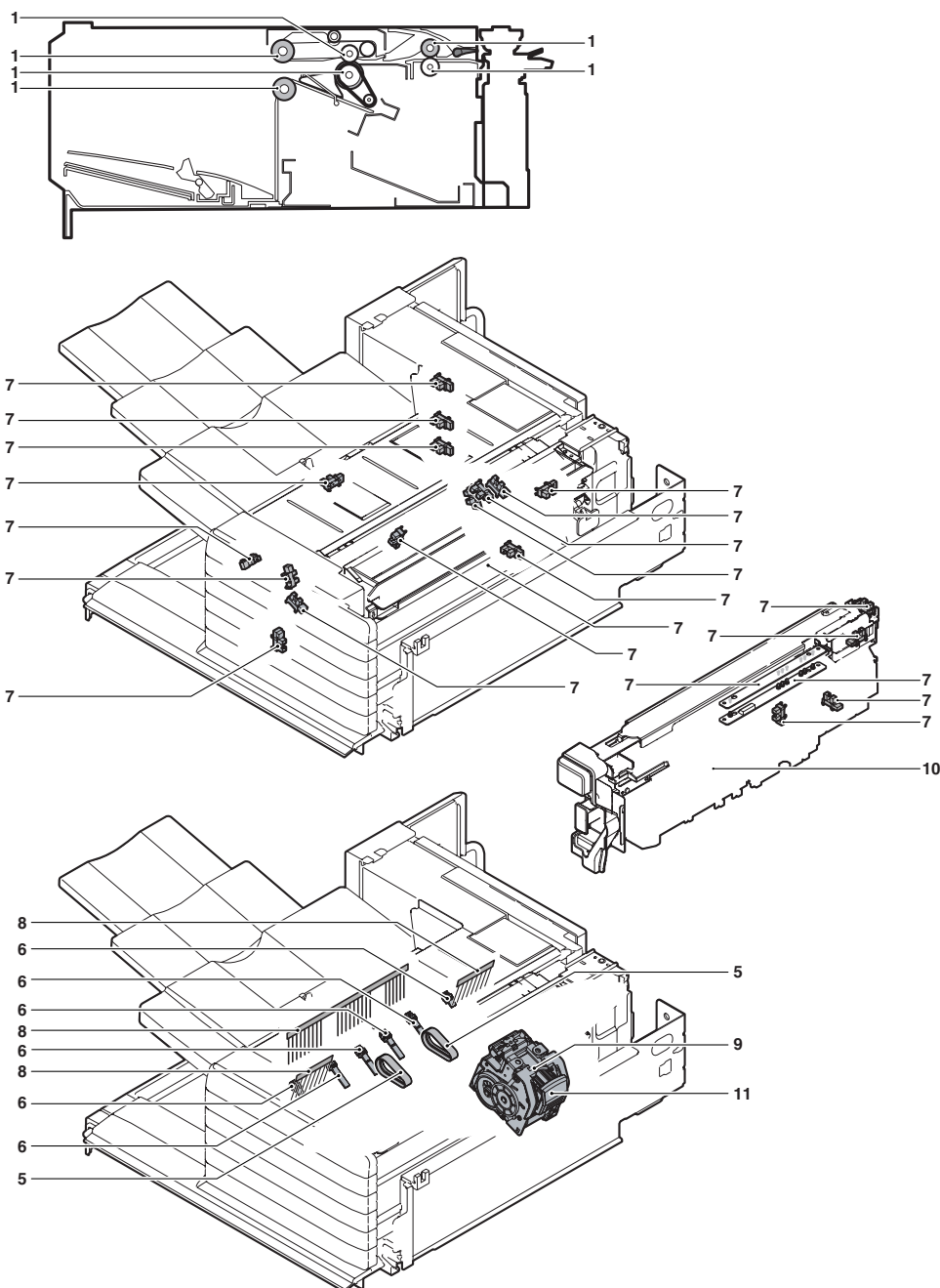


[7] MAINTENANCE

1. Maintenance system table

×: Check (Clean, replace, or adjust according to the necessity.) ○: Clean ▲: Replace △: Adjust ☆: Lubricate □: Shift position

No.	Part name	When calling	Follows the main unit cycle.	Remark
1	Transport rollers	×	○	
2	Transport paper guides	×	○	
3	Gears	×	×	
4	Belts		×	
5	Knurling belt	×	○	Replacement reference: Finisher count value of 1000K.
6	Paddle	×	○	
7	Sensors	×	×	
8	Discharge brush	×	×	
9	Stapler unit	Replacement reference: Replace the unit for every 200K stapling.		
10	Punch unit	Replacement reference: Replace the unit for every 1000K punching.		
11	Staple cartridge	User replacement for every use of 5,000 pcs.		



[8] ADJUSTMENTS

Each adjustment item in the adjustment item list is identified with its own JOB No. The adjustments are basically executed in the sequence from a smaller JOB No. to a larger JOB No.

There is, however, no need to perform all the adjustment items. Only the necessary items may be executed depending on the situation.

Unnecessary items may be skipped to go to the next necessary item. In this case, of course, the adjustment sequence could be executed from a smaller to a larger JOB No.

If the above is neglected, the adjustment cannot be completed normally, resulting in a trouble.

[Start of simulation]

- 1) Press [COPY MODE] key to enter the copy mode.
- 2) Press [P] (Program) key → [*] (Asterisk) key → [C] (Clear) key → [*] (Asterisk) key in this sequence.
- 3) The display is shifted to the simulation main number entry screen (entry standby screen).

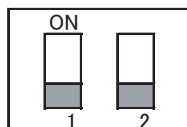
1. Setting item list

JOB No.	Adjustment item list	Simulation to be used
1	Punch unit, punch PWB destination setting	—
2	Finisher adjustment	3-10
3	Flapper solenoid adjustment	—
4	Punch home position adjustment	—

2. Details

1 Punch unit, punch PWB destination setting

- 1) When the punch PWB is replaced, the destination setting must be performed.
- 2) For destination setting, the DIP switch (SW1) on the punch PWB is used.



- 3) The relationship between the switches and the destinations is shown in the table below.

Model	Kind of punching	1	2
MX-PNX1A	2-hole type	OFF	OFF
MX-PNX1B	2/3-hole type	ON	OFF
MX-PNX1C	4-hole type (France)	OFF	ON
MX-PNX1D	4-hole type (Sweden)	ON	ON

2 Finisher adjustment

- 1) Enter Simulation 3-10.
- 2) Select a set item with [↑] [↓] buttons. The highlighted section of the set value is changed and is displayed on the setting area.
 - * If there is any item over [↑], the display becomes active and the cursor can be moved.
 - If there is no item over [↑], the display grays out and the operation is disabled.
 - If there is any item under [↓], the display becomes active and the cursor can be moved.
 - If there is no item under [↓], the display grays out and the operation is disabled.
- 3) Enter the set value with 10-key.
 - * Press [C] key to clear the entered value.
- 4) When [OK] button is pressed, it is highlighted and the entered value is saved to EEPROM and RAM. After completion of setting, [OK] button returns to the normal display.
 - * When [OK], [↑], [↓] button, [COLOR], or [BLACK & WHITE] key is pressed, the current set value is saved to EEPROM and RAM.
 - * When the reset key is pressed, the simulation is terminated.
 - * When [SYSTEM SETTINGS] key is pressed, the display returns to the sub number entry screen.

<Set range and default value of each set value>

Item	Display	Item	Set range	Default value
A	FRONT ADJUST	Alignment position adjustment (Front)	2 to 18	10
B	REAR ADJUST	Alignment position adjustment (Rear)	2 to 18	10
C	STAPLE REAR	Staple binding position adjustment (One position, rear)	68 to 132	100
D	STAPLE FRONT	Staple binding position adjustment (One position, front)	68 to 132	100
E	STAPLE BOTH	Staple binding position adjustment (2 positions, center)	68 to 132	100
F	STAPLE PITCH	Staple binding position (2 positions, pitch)	68 to 132	100
G	PUNCH CENTER	Punch center adjustment	37 to 63	50
H	PUNCH HOLE	Punch hole position adjustment	42 to 58	50

<Variation and change direction of each set value>

Item	Display	Item	Variation	Change direction
A	FRONT ADJUST	Alignment position adjustment (Front)	0.3665mm	Large value: The alignment plate position is shifted to the center. Small value: The alignment plate position is shifted to the outside.
B	REAR ADJUST	Alignment position adjustment (Rear)	0.3665mm	Large value: The alignment plate position is shifted to the center. Small value: The alignment plate position is shifted to the outside.
C	STAPLE REAR	Staple binding position adjustment (One position, rear)	0.155mm	Large value: The distance between the staple position and the paper edge becomes shorter. Small value: The distance between the staple position and the paper edge becomes longer.

Item	Display	Item	Variation	Change direction
D	STAPLE FRONT	Staple binding position adjustment (One position, front)	0.155mm	Large value: The distance between the staple position and the paper edge becomes longer. Small value: The distance between the staple position and the paper edge becomes shorter.
E	STAPLE BOTH	Staple binding position adjustment (2 positions, center)	0.155mm	Large value: The staple position is shifted to the bottom from the center. Small value: The staple position is shifted to the front from the center.
F	STAPLE PITCH	Staple binding position adjustment (2 positions, pitch)	0.155mm	Large value: The pitch of 2 positions becomes greater. Small value: The pitch of 2 positions becomes smaller.
G	PUNCH CENTER	Punch center adjustment	0.1441mm	Large value: The hole position is shifted to the bottom from the center. Small value: The hole position is shifted to the front from the center.
H	PUNCH HOLE	Punch hole position adjustment	0.2584mm	Large value: The distance between the hole position and the paper rear edge becomes shorter. Small value: The distance between the hole position and the paper rear edge becomes longer.

[Screen]

TEST SIMULATION NO.03-10

0

CLOSE

FINISHER ADJUSTMENT

A: 10

[2 ~ 18]

A: 10 ; FRONT ADJUST

B: 10 ; REAR ADJUST

C: 100 ; STAPLE REAR

D: 100 ; STAPLE FRONT

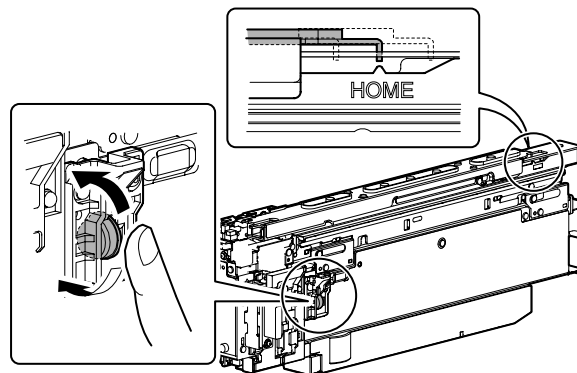
↑

↓

OK

4 Punch home position adjustment

In case the punch unit comes out of order and does not function, turn the dial to make the punch align to the home position. By making the punch align to the home position, only the paper feed comes possible.



3 Flapper solenoid adjustment

When the flapper solenoid is disassembled, an adjustment is required when assembling. (Disassembly and assembly: Refer to 6-2.)

[9] SELF DIAGNOSTICS AND TROUBLE CODES

1. Trouble code and troubleshooting

A. MX-FNX1

Phenomenon	Though the main switch of the main unit is turned ON, the inner finisher does not operate. Trouble code: F1-00	
Case 1	Cause	Connection failure with the main unit.
	Check & Remedy	Check to confirm the connection state of the connectors.
Case 2	Cause	Connection failure of the connector contact pin (interface harness) with the main unit.
	Check & Remedy	Check to confirm the conduction state of the connectors. If there is no conduction, replace the connection wire.
Case 3	Cause	Front cover switch (FDSW) trouble
	Check & Remedy	Check to confirm the conduction state of the connectors. If there is no conduction, replace the connection wire.
Case 4	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 3, if DC24V and DV5V are not supplied from the main unit and if 24V is not supplied to TP14 and 5V is not supplied to TP17, replace the control PWB.

Phenomenon	The transport motor (FRM) does not operate. The bundle exit motor (FAM) does not operate.	
Case 1	Cause	Motor connector pin contact failure
	Check & Remedy	Check the connection state of the connector. (CN14)
Case 2	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the motor.
Case 3	Cause	Control PWB trouble
	Check & Remedy	If the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon	Roller up/down motor (FSWM) does not operate. Trouble code: F1-03	
Case 1	Cause	Roller up/down sensor (FRLD) trouble
	Check & Remedy	Measure the voltage of TP12 on the control PWB to confirm that it is 5V±5% when the paper exit roller descends, and 1V or less when the paper exit roller rises. If the voltage does not satisfy the said condition, replace the sensor.
Case 2	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the motor.
Case 3	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 and 2, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon	The alignment motor F (FFJM) does not operate. Trouble code: F1-19 The alignment motor R (FRJM) does not operate. Trouble code: F1-20	
Case 1	Cause	Alignment plate HP sensor F (FFJHPD) trouble
	Check & Remedy	Measure the voltage of TP9 on the control PWB to confirm that it is 5V±5% when the alignment plate is pushing against the center portion, and is 1V or less when the alignment plate is pushing against the front side (home position). If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Alignment plate HP sensor R (FRJHPD) trouble
	Check & Remedy	Measure the voltage of TP10 on the control PWB to confirm that it is 5V±5% when the alignment plate is pushing against the center portion, and is 1V or less when the alignment plate is pushing against the rear side (home position). If the voltage does not satisfy the above condition, replace the sensor.
Case 3	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the coil.
Case 4	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 3, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon	A paper jam error is displayed on the system display.	
Case 1	Cause	Paper jam
	Check & Remedy	Visually check and remove the paper jam
Case 2	Cause	Inlet port sensor (FED) trouble
	Check & Remedy	Measure the voltage of TP11 on the control PWB to confirm that it is 1V or less when paper is empty, and is 5V±5% when paper is provided. If the voltage does not satisfy the above condition, replace the sensor.
Case 3	Cause	Empty sensor (FSTPD) trouble
	Check & Remedy	Measure the voltage of TP8 on the control PWB to confirm that it is 1V or less when paper is empty, and is 5V±5% when paper is provided. If the voltage does not satisfy the above condition, replace the sensor.
Case 4	Cause	Control PWB trouble
	Check & Remedy	If the phenomenon is not removed though the sensor level is changed by turning ON/OFF each sensor, replace the control PWB.

Phenomenon	A document is not detected.	
Case 1	Cause	Tray paper empty sensor (FBED) trouble
	Check & Remedy	Measure the voltage of TP4 on the control PWB to confirm that it is 5V±5% when paper is empty, and is 1V or less when paper is provided. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Control PWB trouble
	Check & Remedy	If the phenomenon is not removed though the sensor level is changed by turning ON/OFF each sensor, replace the control PWB.

Phenomenon	A document is discharged to the reverse path in the operation other than reverse operation.	
Case 1	Cause	Flapper solenoid (FINRPS) connector pin trouble
	Check & Remedy	Check the connection state of the connector. (CN15)
Case 2	Cause	Solenoid coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the coil.
Case 3	Cause	Control PWB trouble
	Check & Remedy	If the flapper solenoid (FINRPS) does not operate in the solenoid single operation mode, replace the control PWB.

Phenomenon	The belt separation solenoid (FBRs) does not operate. The paper surface detection solenoid (FSLs) does not operate The paddle one-rotation solenoid (FPDS) does not operate.	
Case 1	Cause	Solenoid connector pin trouble
	Check & Remedy	Check the connection state of the connector. (CN15, 20)
Case 2	Cause	Solenoid coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the coil.
Case 3	Cause	Control PWB trouble
	Check & Remedy	If the solenoid does not operate in the single operation mode of the belt separation solenoid (FBRs), the paper surface detection solenoid (FSLs), or the paddle one-rotation solenoid (FPDS), replace the control PWB.

Phenomenon	The take-up belt does not operate normally.	
Case 1	Cause	Take-up belt sensor (FBRD) trouble
	Check & Remedy	Measure the voltage of TP13 on the control PWB to confirm that it is 5V±5% when the belt descends, and is 1V or less when the belt separates. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Control PWB trouble
	Check & Remedy	If the phenomenon is not removed though the sensor level is changed by turning ON/OFF each sensor, replace the control PWB.

Phenomenon	The stapler shift motor does not operate. Trouble code: F1-08	
Case 1	Cause	Stapler HP sensor (FSTHPD) trouble
	Check & Remedy	Measure the voltage of TP7 on the control PWB to confirm that it is 5V±5% when the stapler unit is pushing against the front side (home position), and is 1V or less when the stapler unit is pushing against the rear side. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the coil.
Case 3	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 2, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon	The stapler does not operate. Trouble code: F1-10	
Case 1	Cause	Alignment plate position sensor (FJPD) trouble
	Check & Remedy	Measure the voltage of TP50 on the control PWB to confirm that it is 1V or less when the stapler is at the paper rear edge stopper section, and is 5V±5% when the stapler is not at that position. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Stapler home sensor (FSDPD) trouble
	Check & Remedy	Measure the voltage of TP51 on the control PWB to confirm that it is 5V±5% at the stapling mechanism home position, and is 1V or less when stapling. If the voltage does not satisfy the above condition, replace the stapler.
Case 3	Cause	Self priming sensor (FSTD) trouble
	Check & Remedy	Measure the voltage of TP52 on the control PWB to confirm that it is 5V±5% when a cartridge is provided (READY state), and is 1V or less when a cartridge is not provided. If the voltage does not satisfy the above condition, replace the stapler.
Case 4	Cause	Staple empty sensor (FSD) trouble
	Check & Remedy	Measure the voltage of TP53 on the control PWB to confirm that it is 5V±5% when a cartridge is provided (with staples), and is 1V or less when a cartridge is not provided. If the voltage does not satisfy the above condition, replace the stapler.
Case 5	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the stapler.
Case 6	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 5, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon	The tray does not operate. Trouble code: F1-15	
Case 1	Cause	The paper surface sensor 1 (FSLD1), paper surface sensor 2 (FSLD2) trouble
	Check & Remedy	Measure the voltage of TP5 and 6 on the control PWB to confirm that it is changed in the range of 1V or less to 5V±5% when the paper holding lever is moved. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Tray upper limit sensor (FULD) trouble
	Check & Remedy	Measure the voltage of TP1 on the control PWB to confirm that it is 1V or less when the tray is at the upper limit position, and is 5V±5% when the tray is not at the upper limit position. If the voltage does not satisfy the above condition, replace the sensor.
Case 3	Cause	Tray intermediate lower limit sensor (FMLLD) trouble
	Check & Remedy	Measure the voltage of TP2 on the control PWB to confirm that it is 1V or less when the tray is at the intermediate position, and is 5V±5% when the tray is not at the intermediate position. If the voltage does not satisfy the above condition, replace the sensor.
Case 4	Cause	Tray lower limit sensor (FLLD) trouble
	Check & Remedy	Measure the voltage of TP3 on the control PWB to confirm that it is 1V or less when the tray is at the lower limit position, and is 5V±5% when the tray is not at the lower limit position. If the voltage does not satisfy the above condition, replace the sensor.
Case 5	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the stapler.

Case 6	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 5, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon		The fan (FFAN) does not operate. Trouble code: F1-21
Case 1	Cause	Pinching of a foreign material
	Check & Remedy	Visually check to remove a foreign material from the inlet port.
Case 2	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the motor.
Case 3	Cause	Lock detection trouble
	Check & Remedy	Measure the voltage of TP88 on the control PWB to confirm that it is 1V or less when lock is released, and is 5V±5% when lock is set. If the voltage does not satisfy the above condition, replace it.
Case 4	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 3, if the fan (FFAN) does not operate in the motor single operation mode, replace the control PWB.

B. MX-PNX1A/B/C/D

Phenomenon		Though the main switch of the main unit is turned ON, the inner punch does not operate at all.
Case 1	Cause	Connection failure with the inner finisher
	Check & Remedy	Check to confirm that each connector is connected properly.
Case 2	Cause	Connection failure of the drawer connector with the inner finisher
	Check & Remedy	Check the conduction state of the connector pins as well as the inner finisher. If there is no conduction, replace the drawer connector.
Case 3	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 and 2, if DC24V and DC5V are not supplied from the main unit or if 24V is not output to TP19 and 5V is not output to TP22 on the control PWB, replace the control PWB.

Phenomenon	The punch motor (FPM) does not operate. Trouble code: F1-34	
Case 1	Cause	Punch position sensor (FPHPD) trouble
	Check & Remedy	Measure the voltage of TP47 on the inner finisher control PWB to confirm that it is 5V±5% at the home position, and is 1V or less when punching. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Rear position sensor (FPRPD) trouble
	Check & Remedy	Measure the voltage of TP48 on the inner finisher control PWB to confirm that it is 5V±5% at the lower limit position, and is 1V or less at the upper limit position. If the voltage does not satisfy the above condition, replace the sensor.
Case 3	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the coil.
Case 4	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 to 3, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon		Punch horizontal resist motor (FPSM) does not operate. Trouble code: F1-33
Case 1	Cause	Horizontal shift HP sensor (FPSHPD) trouble
	Check & Remedy	Measure the voltage of TP49 on the inner finisher control PWB to confirm that it is 5V±5% at the home position, and is 1V or less at the upper limit position. If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Motor coil disconnection
	Check & Remedy	Perform the conduction test of the coil. If there is no conduction, replace the coil.
Case 3	Cause	Control PWB trouble
	Check & Remedy	After checking the above 1 and 2, if the phenomenon is not removed though the sensor level is changed and if the motor does not operate in the motor single operation mode, replace the control PWB.

Phenomenon		The punch dust container full is not detected.
Case 1	Cause	Full sensor (FPDD) trouble
	Check & Remedy	If there is no punch dust in the punch dust container, measure the voltage of TP2 on the control PWB to confirm that it is 5V±5% when the punch dust container is removed, and is 1V or less when the lever in the punch dust container is put straight and stored (the sensor is shaded from the light). If the voltage does not satisfy the above condition, replace the sensor.
Case 2	Cause	Control PWB trouble
	Check & Remedy	If the phenomenon is not removed though the sensor level is changed by turning ON/OFF the sensor, replace the control PWB.

Phenomenon		A paper jam error is displayed on the system display.
Case 1	Cause	Paper jam
	Check & Remedy	Visually check and remove the paper jam.
Case 2	Cause	Paper rear edge sensor (FPPEND) trouble
	Check & Remedy	Measure the voltage of TP54 on the inner finisher control PWB to confirm that it is 1.05V or less when paper is supplied, and is 2.88V or more when paper is empty. If the voltage does not satisfy the above condition, replace the sensor PWB (LED, PTR).
Case 3	Cause	Paper horizontal resist sensor (FPPD1 to 6) trouble
	Check & Remedy	Measure the voltage of TP55 on the inner finisher control PWB to confirm that it is 1.05V or less when paper is supplied, and is 2.88V or more when paper is empty. If the voltage does not satisfy the above condition, replace the sensor PWB (LED, PTR).
Case 4	Cause	Control PWB trouble
	Check & Remedy	If the phenomenon is not removed though the sensor level is changed by turning ON/OFF the sensor, replace the control PWB.

[10] ELECTRICAL SECTION

1. Circuit descriptions

A. MX-FNX1

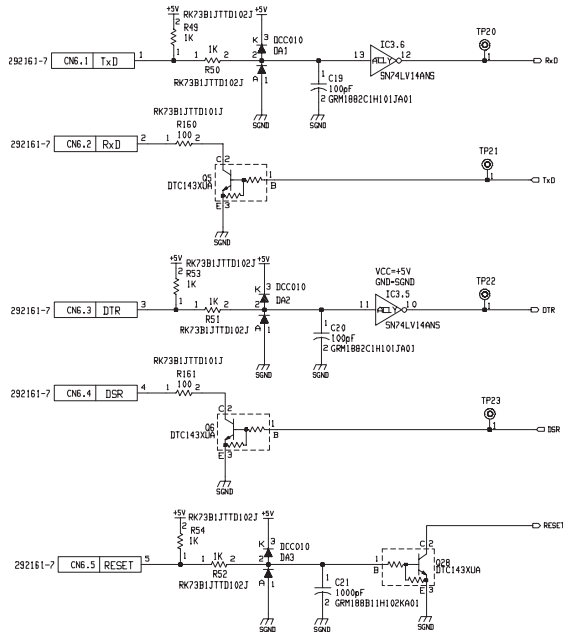
(1) General

This circuit controls transport, alignment (bundle alignment), staple, and exit of paper discharged from the main unit.

This circuit is composed of sensors, switches, the circuit which processes signals from the main unit, the circuit which drives motors and solenoids, the CPU, and its peripheral circuits.

(2) Circuit descriptions

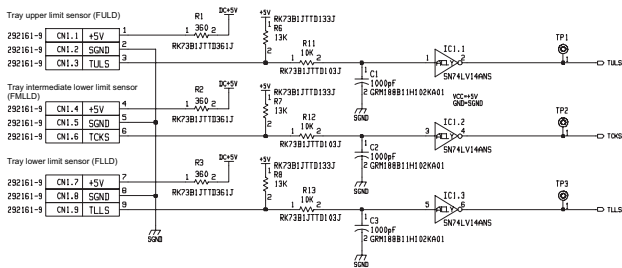
a. Communication circuit



This circuit is the communication circuit with the main unit.

TxD and DTR are data to be sent from the main unit to the inner finisher. Rx D and DSR are data to be sent from the inner finisher to the main unit. The reset signal from the main unit is inputted to RESET.

b. Sensor input circuit



1) Tray upper limit sensor (FULD)

The tray upper limit sensor (FULD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The upper limit is detected by interruption of lights with the light-shielding plate.

Signals are inputted to the multiplexer (IC14-13pin) through the noise filter of R11 and C1.

The logic of the signal inputted to the CPU is L for the tray upper limit position.

R1 is the current-limiting resistor of the light emitting diode. R6 is the load resistor of the sensor.

2) Tray intermediate lower limit sensor (FMLLD)

The tray intermediate lower limit sensor (FMLLD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The lower limit is detected by interruption of lights with the light-shielding plate.

Signals are inputted to the multiplexer (IC14-14pin) through the noise filter of R12 and C2.

The logic of the signal inputted to the CPU is L for the tray intermediate position.

R2 is the current-limiting resistor of the light emitting diode. R7 is the load resistor of the sensor.

3) Tray lower limit sensor (FLLD)

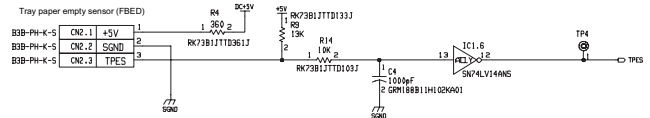
The tray lower limit sensor (FLLD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The lower limit is detected by interruption of lights with the light-shielding plate.

Signals are inputted to the multiplexer (IC14-15pin) through the noise filter of R13 and C3.

The logic of the signal inputted to the CPU is L for the tray lower limit position.

R3 is the current-limiting resistor of the light emitting diode. R8 is the load resistor of the sensor.



4) Tray paper empty sensor (FBED)

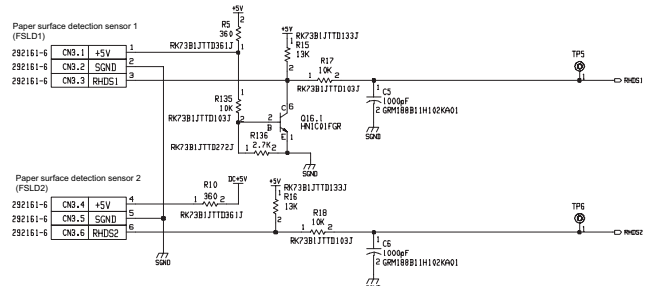
The tray empty sensor (FBED) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

Paper empty is detected by interruption of lights with the lever-type actuator.

Signals are inputted to the CPU (IC10-74pin) through the noise filter of R14 and C4.

The logic of the signal inputted to the CPU is L when paper is loaded to the tray, and H for paper empty.

R4 is the current-limiting resistor of the light emitting diode. R9 is the load resistor of the sensor.



5) Paper surface sensor 1 (FSLD1)

The paper surface sensor 1 (FSLD1) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The paper surface is detected by interruption of lights with the lever-type actuator.

By use of Q16, the logic of signal when the connector is disconnected is made the same as when light is emitted to the sensor.

Signals are inputted to the CPU (IC10-88pin) through the noise filter of R17 and C5.

The logic of the signal inputted to the CPU is H when light is interrupted, and L when light is emitted to the sensor.

R5 is the current-limiting resistor of the light emitting diode. R15 is the load resistor of the sensor.

6) Paper surface sensor 2 (FSLD2)

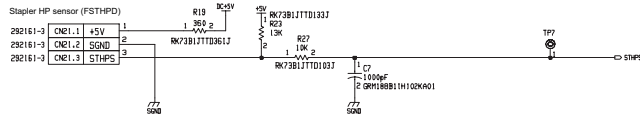
The paper surface sensor 2 (FSLD2) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The paper surface is detected by interruption of lights with the lever-type actuator.

Signals are inputted to the CPU (IC10-89pin) through the noise filter of R18 and C6.

The logic of the signal inputted to the CPU is H when light is interrupted, and L when light is emitted to the sensor.

R10 is the current-limiting resistor of the light emitting diode. R16 is the load resistor of the sensor.



7) Stapler HP sensor (FSTHPD)

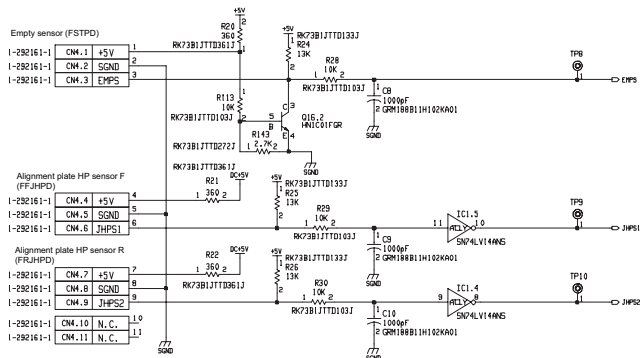
Stapler HP sensor (FSTHPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The home position is detected by interruption of lights with the actuator of the light-shielding plate.

Signals are inputted to the CPU (IC10-18pin) through the noise filter of R27 and C7.

The logic of the signal inputted to the CPU is H at the stapler unit home position.

R19 is the current-limiting resistor of the light emitting diode. R23 is the load resistor of the sensor.



8) Empty sensor (FSTPD)

The empty sensor (FSTPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

Paper empty is detected by interruption of lights with the lever-type actuator.

By use of Q16, the logic of signal when the connector is disconnected is made the same as when light is emitted to the sensor (paper empty).

Signals are inputted to the CPU (IC10-90pin) through the noise filter of R28 and C8.

The logic of the signal inputted to the CPU is H when paper is provided in the process tray, and L when paper is not provided. R20 is the current-limiting resistor of the light emitting diode. R24 is the load resistor of the sensor.

9) Alignment plate HP sensor F (FFJHPD)

The alignment plate HP sensor F (FFJHPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The home position is detected by interruption of lights with the actuator of the light-shielding plate.

Signals are inputted to the CPU (IC10-57pin) through the noise filter of R29 and C9.

The logic of the signal inputted to the CPU is L at the front side alignment guide home position.

R21 is the current-limiting resistor of the light emitting diode. R25 is the load resistor of the sensor.

10) Alignment plate HP sensor R (FRJHPD)

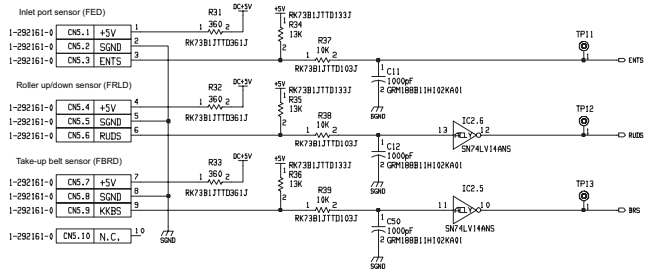
The alignment plate HP sensor R (FRJHPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The home position is detected by interruption of lights with the actuator of the light-shielding plate.

Signals are inputted to the CPU (IC10-58pin) through the noise filter of R30 and C10.

The logic of the signal inputted to the CPU is L at the rear side alignment guide home position.

R22 is the current-limiting resistor of the light emitting diode. R26 is the load resistor of the sensor.



11) Inlet port sensor (FED)

The inlet port sensor (FED) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The inlet port is detected by interruption of lights with the lever-type actuator.

Signals are inputted to the CPU (IC10-71pin) through the noise filter of R37 and C11.

The logic of the signal inputted to the CPU is H when paper is provided, and L when paper is not provided.

R31 is the current-limiting resistor of the light emitting diode. R34 is the load resistor of the sensor.

12) Roller up/down sensor (FRLD)

The roller up/down sensor (FRLD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The roller up/down is detected by interruption of lights with the lever-type actuator.

Signals are inputted to the CPU (IC10-59pin) through the noise filter of R38 and C12.

The logic of the signal inputted to the CPU is L when the roller is at the upper standby position.

R32 is the current-limiting resistor of the light emitting diode. R35 is the load resistor of the sensor.

13) Take-up belt sensor (FBRD)

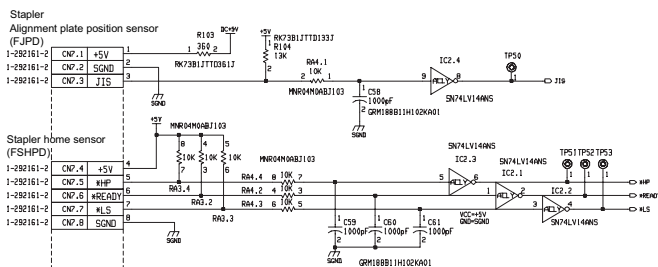
The take-up belt sensor (FBRD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The take-up belt is detected by interruption of lights with the lever-type actuator.

Signals are inputted to the CPU (IC10-61pin) through the noise filter of R39 and C50.

The logic of the signal inputted to the CPU is L when the take-up belt is on the upper side.

R33 is the current-limiting resistor of the light emitting diode. R36 is the load resistor of the sensor.



14) Alignment plate position sensor (FJPD)

The alignment plate position sensor (FJPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The alignment plate position is detected by interruption of lights with the lever-type actuator.

Signals are inputted to the multi-plexer (IC14-12pin) through the noise filter of RA4.1 and C58.

The logic of the signal inputted to the CPU is L when the paper rear edge stopper is provided at the opening of the stapler.

R103 is the current-limiting resistor of the light emitting diode. R104 is the load resistor of the sensor.

15) Stapler home sensor (FSHPD)

The stapler home sensor (FSHPD) is the built-in sensor of the stapler unit.

The home position is detected by the open-collector output with the circuit in the unit.

Signals are inputted to the multi-plexer (IC14-1pin) through the noise filter of RA4.4 and C59.

The logic of the signal inputted to the CPU is H at the stapler mechanism home position.

16) Self priming sensor (FSTD)

The self priming sensor (FSTD) is the built-in sensor of the stapler unit.

Self priming is detected by the open-collector output with the circuit in the unit.

Signals are inputted to the multi-plexer (IC14-5pin) through the noise filter of RA4.2 and C60.

The logic of the signal inputted to the CPU is H in the READY state.

17) Staple empty sensor (FSD)

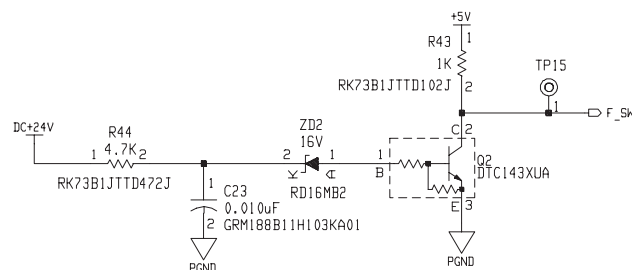
The staple empty sensor (FSD) is the built-in sensor of the stapler unit.

Staple empty is detected by the open-collector output with the circuit in the unit.

Signals are inputted to the multi-plexer (IC14-2pin) through the noise filter of RA4.3 and C61.

The logic of the signal inputted to the CPU is L in case of staple empty.

18) Front cover switch (FDSW)



The front cover switch (FDSW) employs a micro switch to detect open/close of the front cover.

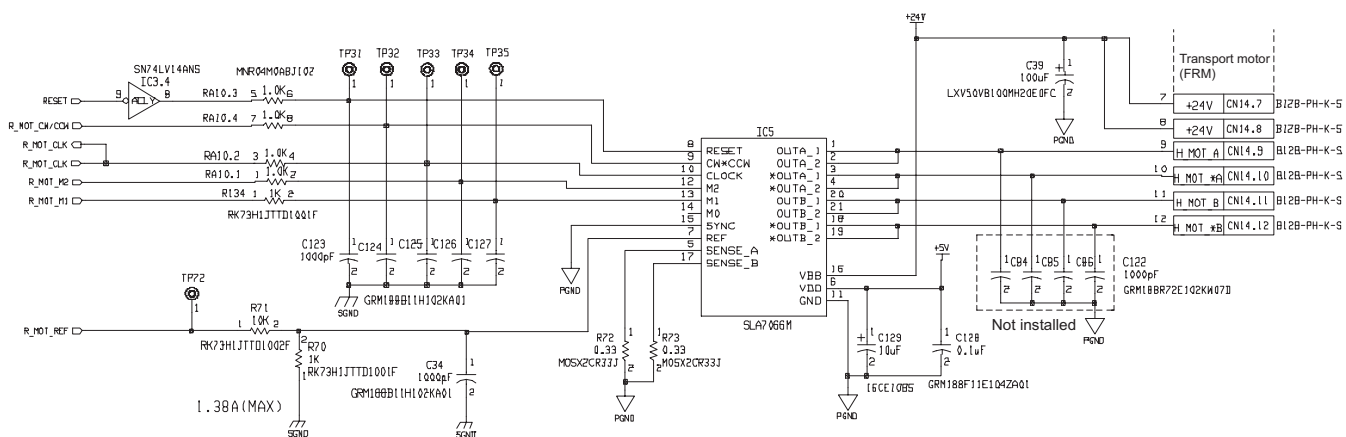
This switch is provided with +24V. By opening the open/close section, the contact is opened to function as a switch.

When the switch is turned ON, +24V is applied to the cathode of ZD2, supplying a base current to Q2 to turn ON Q2. Then open/close signal is inputted to the CPU (IC10-19pin). This signal is commonly used with the inner punch +5V supply signal.

The logic of the signal inputted to the CPU is H when the front cover is open, and L when the front cover is close.

c. Motor drive circuit

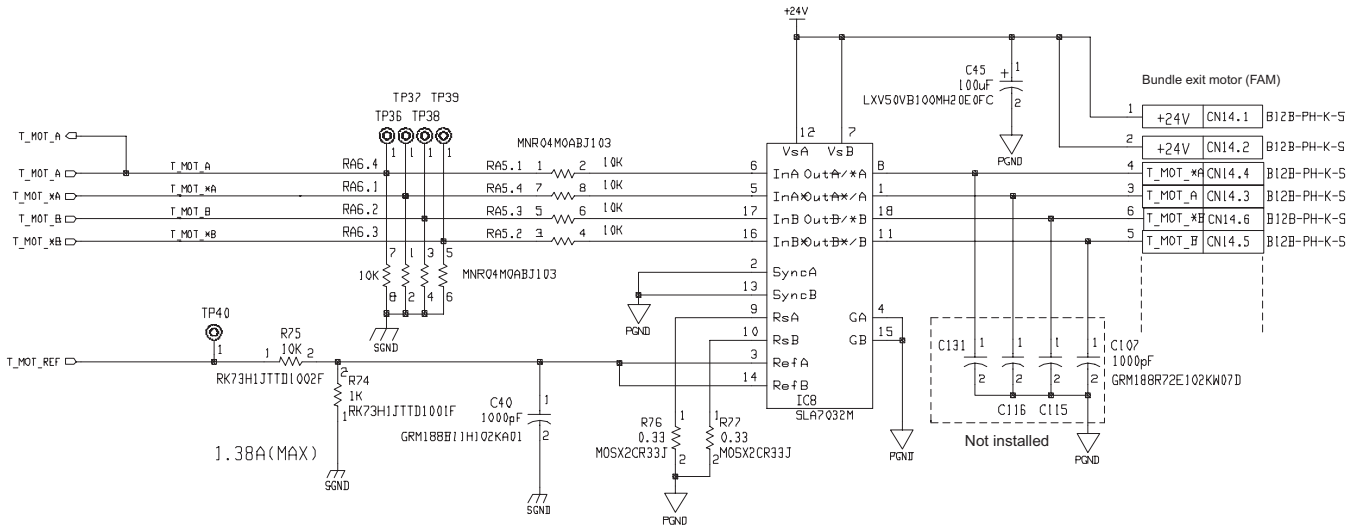
1) Transport motor (FRM) drive circuit



2) Bundle exit motor (FAM) drive circuit

This circuit controls rotation/stop rotating direction and current of the bundle exit motor (FAM), and is composed of the CPU (IC10), the DA converter (IC11), and the constant-current chopper system driver IC (IC8). The motor rotating speed and the rotating direction are controlled with the stepping motor drive excitement pattern signal (T_MOT_A, *A, B, *B) outputted from the CPU (IC10-79, 80, 81, 82pin).

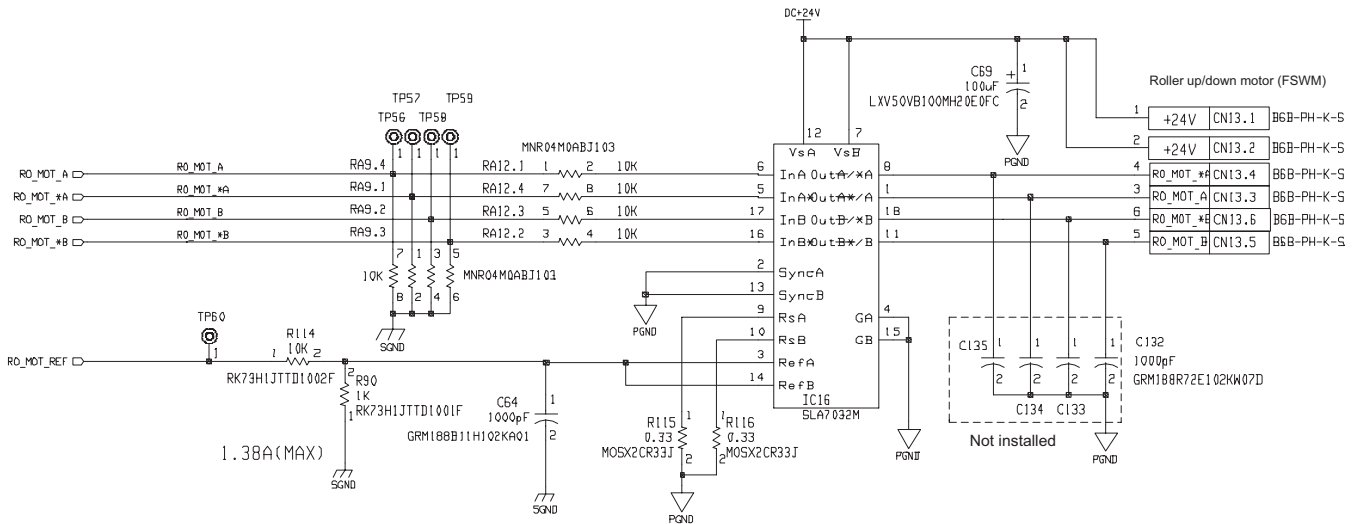
The analog signal (T_MOT_REF) outputted from the DA converter (IC11-5pin) is divided into a certain voltage with R74 and R75. The divided voltage is inputted to IC8-3, 14 pin to set the motor current value.



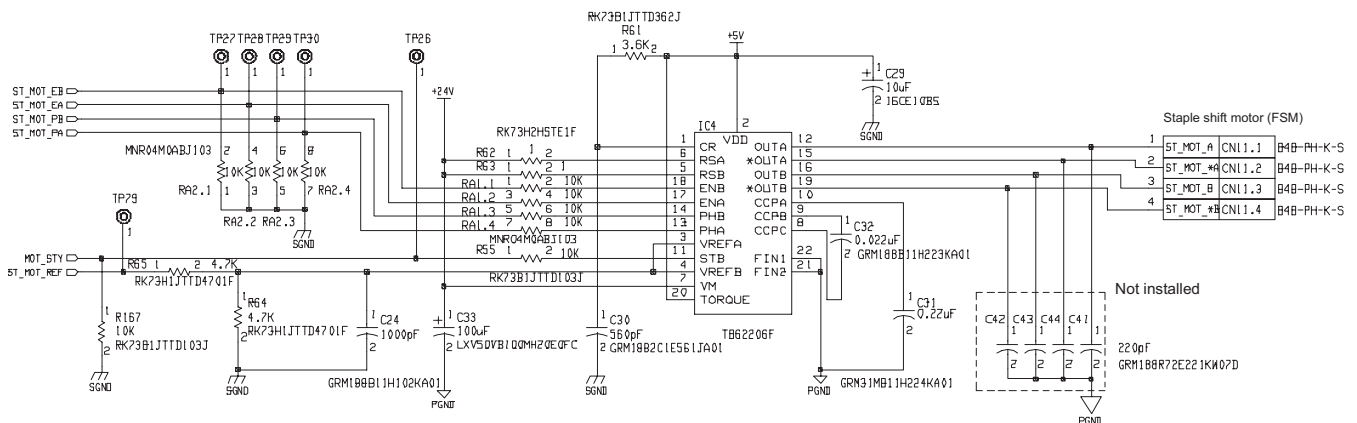
3) Roller up/down motor (FSWM) drive circuit

This circuit controls rotation/stop and the rotating direction of the roller up/down motor (FSWM) and the motor current, and is composed of the CPU (IC10), the DA converter (IC11), and the constant-current chopper system driver IC (IC16). The motor rotating speed and the rotating direction are controlled with the stepping motor drive excitement pattern signal (RO_MOT_A, *A, B, *B) outputted from the CPU (IC10-75, 76, 77, 78pin).

The analog signal (RO_MOT_REF) outputted from the DA converter (IC11-4pin) is divided into a certain voltage with R90 and R114. The divided voltage is inputted to IC16-3, 14pin to set the motor current value.

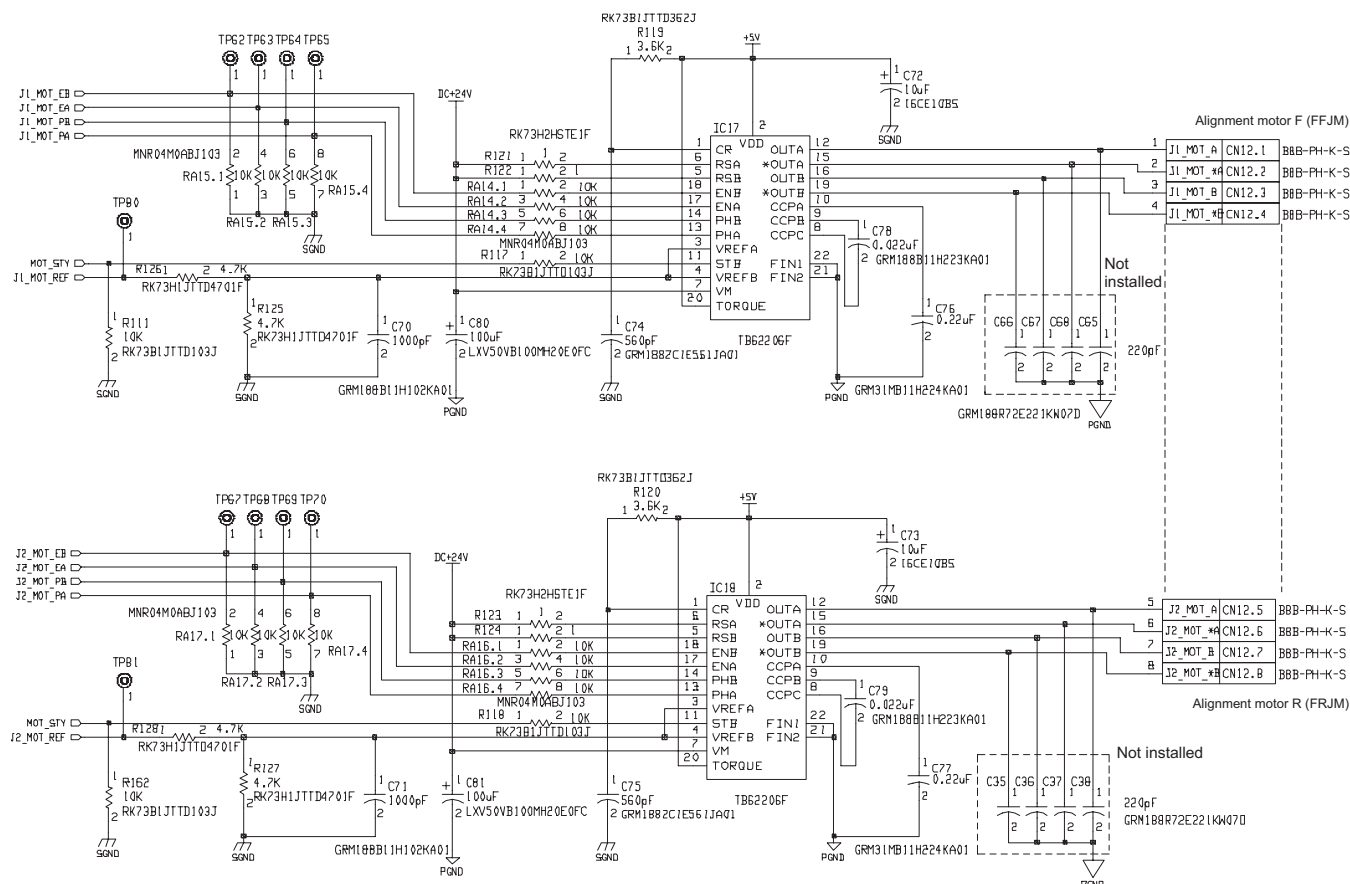


4) Staple shift motor (FSM) drive circuit



The analog signal (ST_MOT_REF) outputted from the DA converter (IC11-18pin) is divided into a certain voltage with R64 and R65. The divided voltage is inputted to IC4-3, 4pin to set the motor current value. The logic of the standby signal (MOT_STY) outputted from the DA converter (IC11-7pin) is H when the motor can be operated (READY).

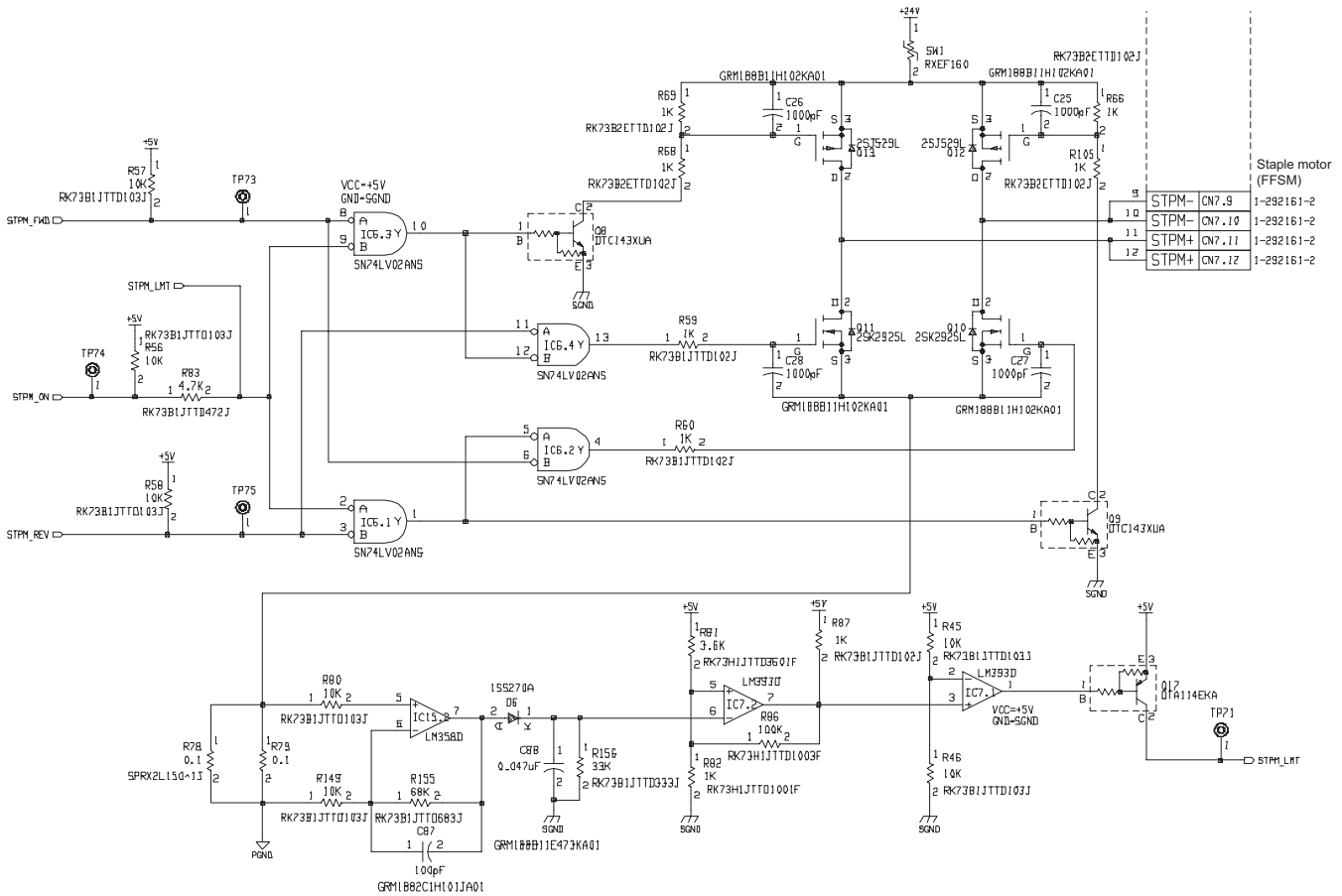
- 5) Alignment motor F (FFJM) drive circuit
- 6) Alignment motor R (FRJM) drive circuit



The analog signal (J1_MOT_REF) outputted from the DA converter (IC11-19pin) is divided into a certain voltage with R125 and R126. The divided voltage is inputted to IC17-3, 4pin to set the motor current value. The logic of the standby signal (MOT_STY) outputted from the DA converter (IC11-7pin) is H when the motor can be operated (READY state).

The analog signal (J2_MOT_REF) outputted from the DA converter (IC11-2pin) is divided into a certain voltage with R127 and R128. The divided voltage is inputted to IC18-3, 4pin to set the motor current value. The logic of the standby signal (MOT_STY) outputted from the DA converter (IC11-7pin) is H when the motor can be operated (READY state).

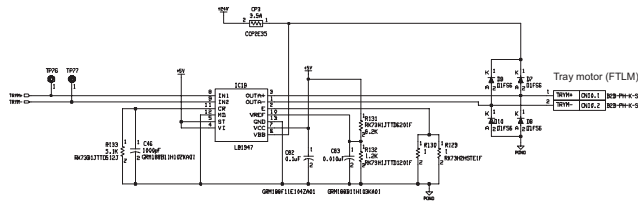
7) Staple motor (FFSM) drive circuit



This circuit controls rotation/stop and the rotating direction of the staple motor (FFSM), and is composed of the CPU (IC10) and the FET (Q10, 11, 12, 13). The DC motor is controlled with the staple motor (FFSM) drive normal rotation signal, the reverse rotation signal, and the brake signal outputted from the CPU (IC10-5, 8, 9pin).

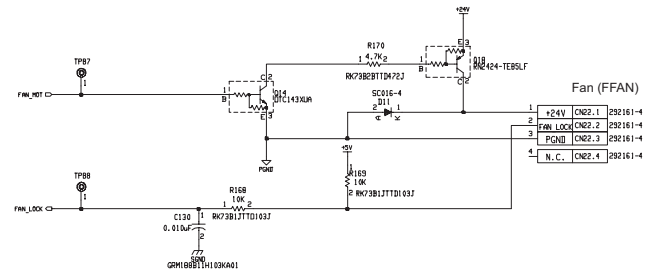
To protect the motor and the mechanism, the current limit circuit is provided, which supplies the motor drive OFF signal when the current flowing through the detection resistors R78 and R79 exceeds 3.8A, restricting the current not to exceed 3.8A.

8) Tray motor (FTLM) drive circuit



This circuit controls the tray motor (FTLM) rotation, stop, and rotating direction, and is composed of the CPU (IC10) and the DC motor driver IC (IC19). The CPU (IC10-69, 70pin) outputs the tray motor (FTLM) drive normal rotation signal, the reverse rotation signal, and the brake signal to control the DC motor. In addition, the current limiting circuit is formed with R129, R130, R131, and R132 for the current flowing through the motor not to exceed 0.65A.

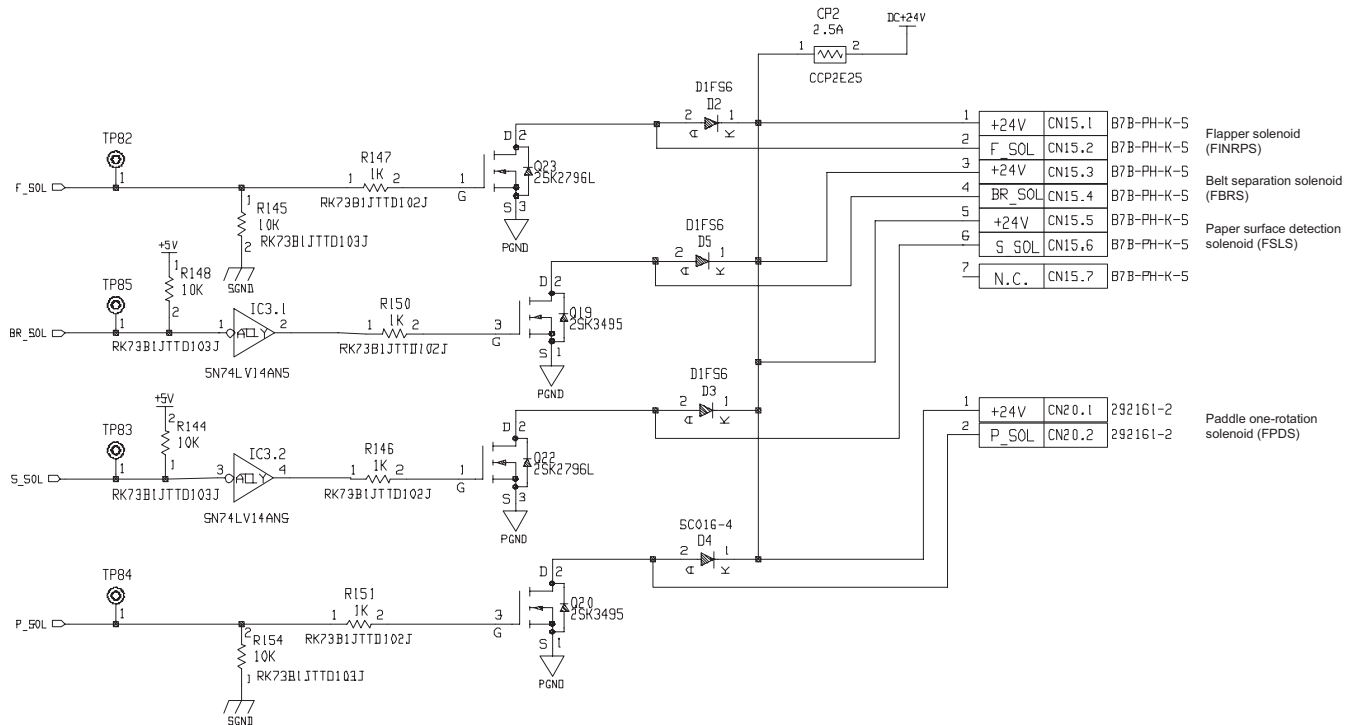
9) Fan (FFAN) drive circuit



This circuit controls the fan (FFAN) rotation, stop, and rotating direction, and is composed of the CPU (IC10) and the digital transistors (Q14, Q18). The DA converter (IC11-13pin) outputs the fan (FFAN) drive signal to drive the motor. The fan lock signal is inputted through the noise filter of R168 and C130 to the CPU (IC10-20pin) by the open drain output of the fan built-in circuit.

The logic of the signal inputted to the CPU is H when locked.

d. Flapper solenoid (FINRPS), belt separation solenoid (FBRs), paper surface detection solenoid (FSLs), paddle one-rotation solenoid (FPDS) drive circuit



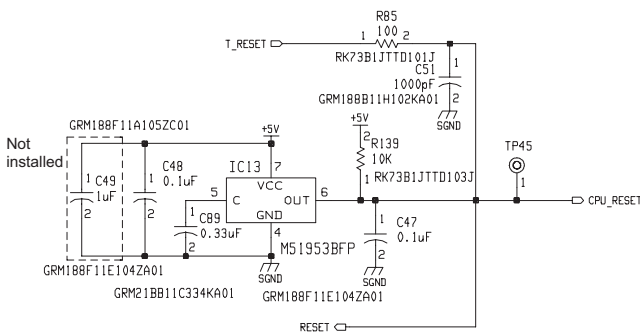
This circuit controls attachment and release of the flapper solenoid (FINRPS), the belt separation solenoid (FBRs), the paper surface detection solenoid (FSLs), and the paddle one-rotation solenoid (FPDS).

The CPU (IC10-24, 26) outputs the drive signal of the flapper solenoid (FINRPS) and the paddle one-rotation solenoid (FPDS) to turn ON Q23 and Q20 to attach the solenoid.

The CPU (IC10-27,28) outputs the drive signal of the belt separation solenoid (FBRs) and paper surface detection solenoid (FSLs) to turn on Q19 and Q22 to attach the solenoid.

The drive signal of the flapper solenoid (FINRPS) and the paper surface detection solenoid is a PWM signal. After completion of attachment, the flapper solenoid (FINRPS) duty is 20%. Paper surface detection solenoid (FSLs): Duty is reduced to 50% and the solenoid temperature rise is reduced to keep attachment.

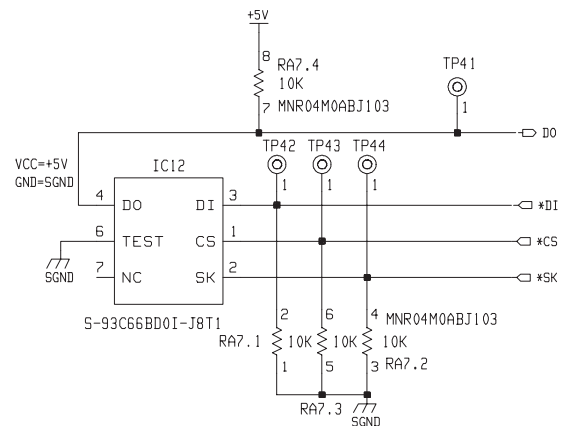
e. Reset circuit



This circuit generates the reset signal and supplies it to the CPU when the power is turned ON and when the power voltage fall is detected.

IC13-6pin (OUT) is normally at HIGH level after turning ON the power. When, however, +5V power voltage falls to 4.05V or less because of power OFF or any other reasons, IC13-6pin is driven to LOW level, resetting the CPU.

f. EEPROM circuit



This circuit is composed of EEPROM which stores data and the peripheral circuit.

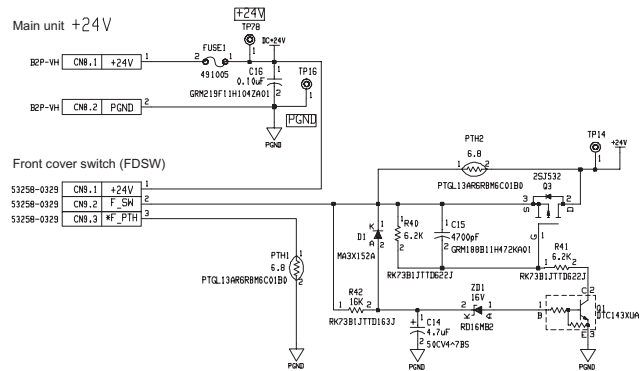
IC12 is a memory which stores the adjustment values of the inner punch transmission-type optical sensor and the alignment plate position, and it sends/receives data to/from the CPU through the 4-wire type serial interface. The data stored once are kept undeleted even when the power is turned OFF.

IC12-1pin (CS) is the chip select pin and is at HIGH level when data are sent or received.

IC12-2pin (SK) is the serial clock pin. Serial data are inputted to this pin and sent in synchronization with the clock.

IC12-3pin (DI) is the serial data input pin, and IC12-4pin (DO) is the serial data output pin.

g. Rush current limit circuit



This circuit limits a rush current flowing through the current-regenerating capacitor in the motor drive system to a certain level. It is composed of the posister (PTH2) which limits a current and the FET (Q3) which flows a current in the steady state.

From when the front cover switch (FDSW) is closed to when the cathode voltage of ZD1 reaches the zener voltage by the time constant of R42 and C14, the base current is not supplied to Q1, turning OFF Q1 and Q3. During this period, a current flows through PTH2 to charge the current regenerating capacitor.

After the current regenerating capacitor is fully charged, when the cathode voltage of ZD1 exceeds the zener voltage by the time constant of R42 and C14, the base current is supplied to Q1 to turn ON Q1 and Q3. The current flowing through PTH2 flows through Q3, releasing the current limit operation.

The circuit composed of PTH1 and D1 immediately removes electric charges accumulated in C14 when the front cover switch (FDSW) is opened. This circuit allows the rush current limit operation for instantaneous open/close of the cover.

B. MX-PNX1A/B/C/D

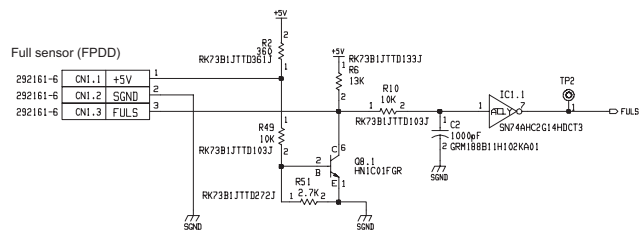
(1) General

This circuit controls the punch function of paper discharged from the main unit.

It is composed of circuits which process signals from sensors and the inner finisher and the circuit which drives the motors.

(2) Circuit descriptions

a. Sensor input circuit



1) Full sensor (FPDD)

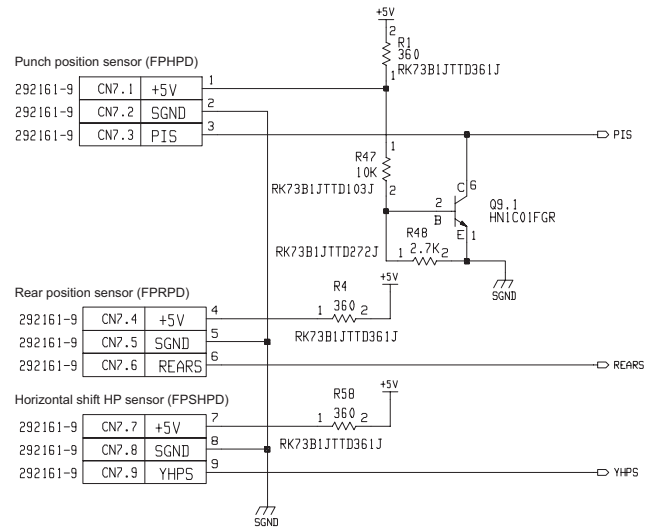
The full sensor (FPDD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The full state is detected by interruption of lights with the light-shielding plate. By use of Q8, the logic when the connector is disconnected is made the same as when light is emitted to the sensor (full).

Signals are inputted through the noise filter of R10 and C2 to the multiplexer (IC4-4pin).

The logic of a signal inputted to the CPU on the inner finisher circuit is fixed to H when the punch dust container is full.

R2 is the current limit resistor of the light emitting diode, and R6 is the load resistor of the sensor.



2) Punch position sensor (FPHPD)

The punch position sensor (FPHPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The full state is detected by interruption of lights with the light-shielding plate. By use of Q9, the logic when the connector is disconnected is made the same as when light is emitted to the sensor (when punching).

Signals are inputted through the noise filter of RA11.2 and C55 in the inner finisher circuit to the CPU (IC10-87pin).

The logic of a signal inputted to the CPU is fixed to H at the home position, and L when punching.

R1 is the current limit resistor of the light emitting diode, and R97 (in the inner finisher circuit) is the load resistor of the sensor.

3) Rear position sensor (FPRPD)

The rear position sensor (FPRPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The rear position is detected by interruption of lights with the light-shielding plate.

Signals are inputted through the noise filter of RA11.3 and C56 in the inner finisher circuit to the CPU (IC10-16pin). The logic of a signal inputted to the CPU is H when light is shielded and L when light is emitted to the sensor.

R4 is the current limit resistor of the light emitting diode, and R98 (in the inner finisher circuit) is the load resistor of the sensor.

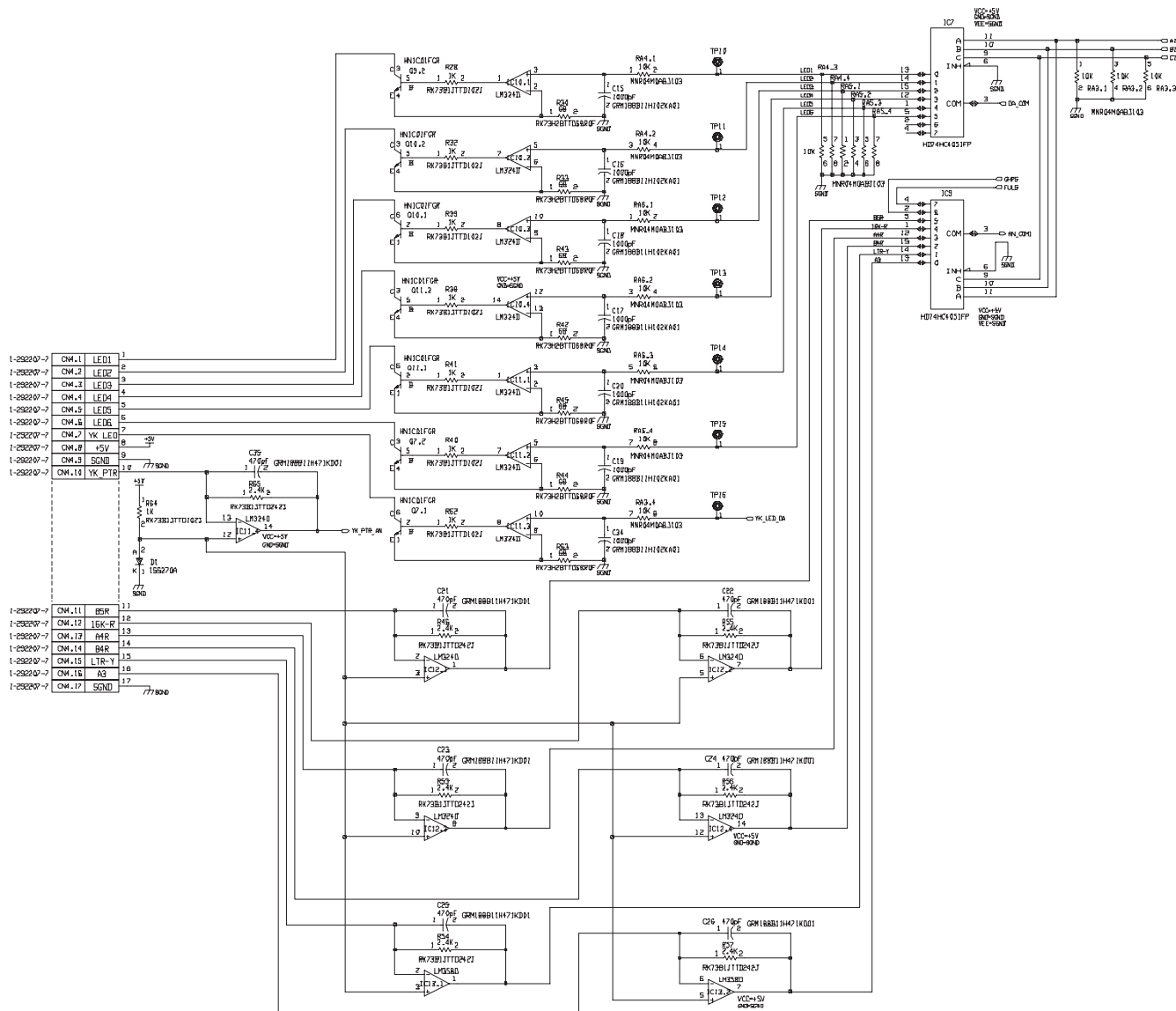
4) Horizontal shift HP sensor (FSPHPD)

The horizontal shift HP sensor (FSPHPD) employs the photo interrupter in which the light emitting diode and the photo transistor are integrated.

The home position is detected by interruption of lights with the light-shielding plate.

Signals are inputted through the noise filter of RA11.4 and C57 in the inner finisher circuit to the CPU (IC10-17pin). The logic of a signal inputted to the CPU is H when light is shielded and L when light is emitted to the sensor.

R58 is the current limit resistor of the light emitting diode, and R99 (in the inner finisher circuit) is the load resistor of the sensor.



5) Paper rear edge sensor (FPPEND) and paper horizontal resist sensor (FPPD1 – 6)

This circuit is a transmission-type optical sensor circuit using the LED PWB and the photo transistor PWB.

Paper is detected when the light path is interrupted by paper passing between the photo transistor PWB and the LED PWB.

The light emitting circuit of LED1 – 6 is composed of the CPU (IC10) on the inner finisher circuit, the DA converter (IC11), the multiplexer (IC7) on the above punch PWB, the operation amplifier (IC10, 11), and the transistors (Q7, 9, 10, 11). The analog signal (DA_COM) and the select signals (A1, B1, C1) are inputted to the multiplexer (IC7-3, 9, 10, 11pin) to select the light emitting circuit. The DA adjustment value outputted from the multiplexer (IC7-1, 5, 12, 13, 14, 15pin) is used to adjust the current flowing through the LED via the operation amplifier and the transistor. R30, 3, 42, 43, 44, 45 are the LED current limit resistors.

The light emitting circuit of YK_LED is composed of the CPU (IC10) on the inner finisher circuit, the DA converter (IC11), the operation amplifier (IC11) on the above punch PWB, and the transistor (Q7). The analog signal (YK_LED_DA : DA adjustment value) adjusts the current flowing through the LED via the operation amplifier and the transistor. R63 is the LED current limit resistor.

The light receiving circuit of B5R, 16K-R, A4R, B4R, LTR-Y, A3 is composed of the CPU (IC10) on the inner finisher circuit, the comparator (IC9), the multiplexer (IC9) on the above punch PWB, and the operation amplifier (IC12, 13).

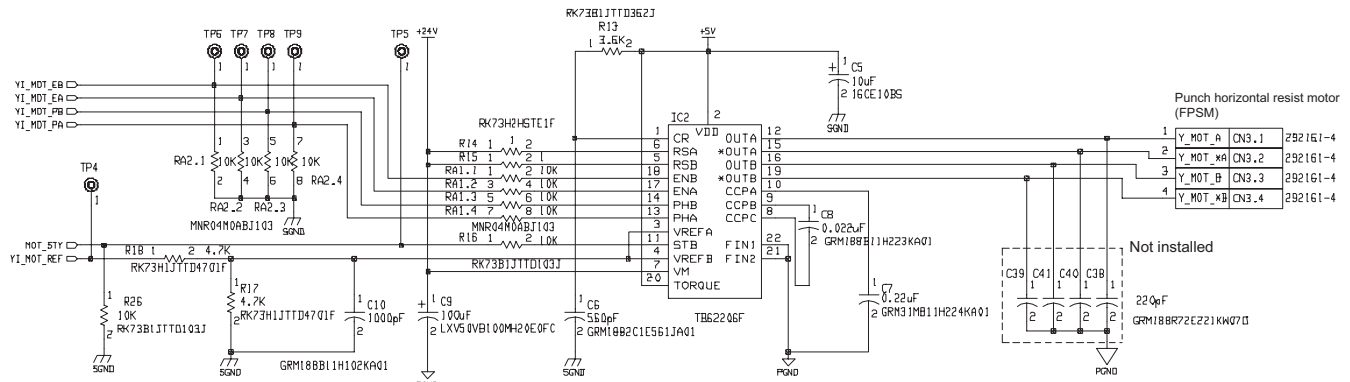
The select signal (A1, B1, C1) inputted to the multiplexer (IC9-9, 10, 11pin) is used to select the light receiving circuit. The sensor output is inputted to the multiplexer (IC9-1, 5, 12, 13, 14, 15pin) through the operation amplifier, and the analog signal (AN_COM1) is inputted to the CPU through the comparator (IC9). R46, 53, 54, 55, 56, and 57 are the load resistors of the photo transistor.

The light receiving circuit of YK_PTR_AN is composed of the CPU (IC10), the comparator (IC9), and the operation amplifier (IC11) on the above punch PWB. The analog signal (YK_PTR_AN) is inputted from the comparator (IC9) through the operation amplifier (IC11) to the CPU. R65 is the load resistor of the photo transistor. The logic of the signal inputted to the CPU is L when paper is provided.

The threshold voltage of the comparator on the inner finisher circuit is 5V divided with R100 and R101.

b. Motor drive circuit

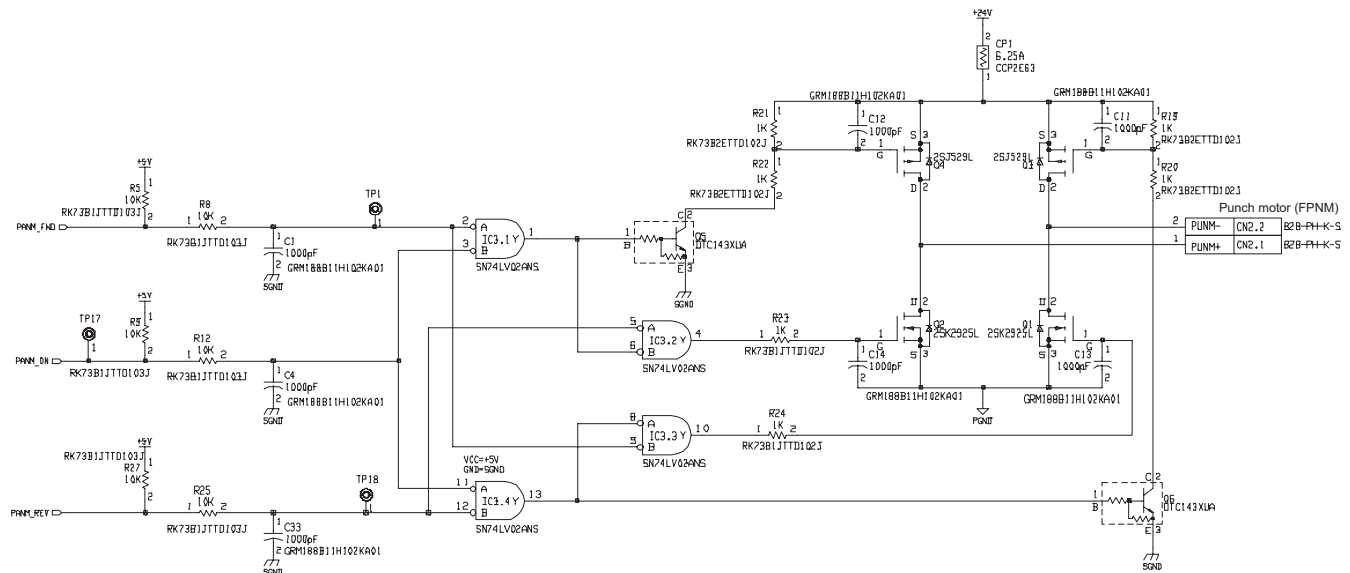
1) Punch horizontal resist motor (FPSM) drive circuit



This circuit controls the punch horizontal resist motor (FPSM) rotation/stop, the rotating direction, and the motor current, and is composed of the CPU (IC10) on the finisher circuit, the DA converter (IC11), and the constant-current chopper type driver IC (IC2) in the above circuit. The stepping motor drive excitement pattern signal (YI_MOT_PA, PB, EA, EB) outputted from the CPU (IC10-83, 84, 85, 86pin) is used to control the motor rotating speed and the rotating direction.

The analog signal (YI_MOT_REF) outputted from the DA converter (IC11-6pin) is divided to a fixed voltage with R17 and R18. This divided voltage is inputted to IC2-3, 4pin to set the motor current value. The logic of the standby signal (MOT_STY) outputted from the DA converter (IC11-7pin) is H when the motor can be operated.

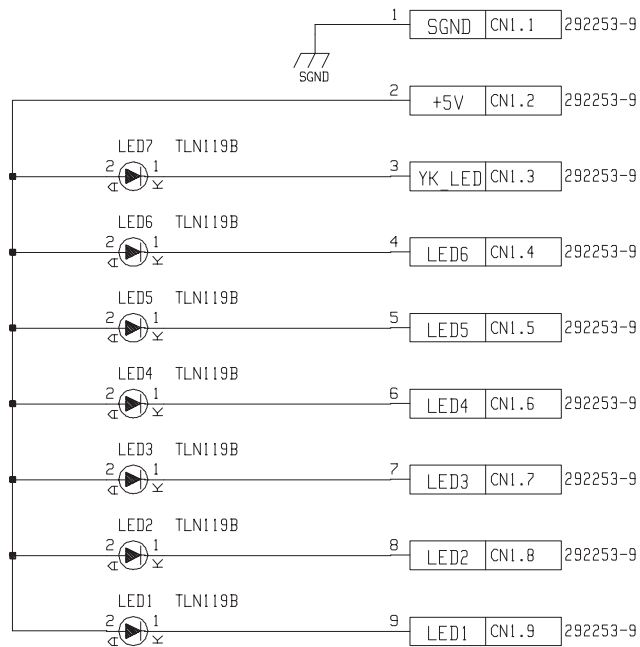
2) Punch motor (FPNM) drive circuit



This circuit controls the punch motor (FPNM) rotation/stop, and the rotating direction, and is composed of the CPU (IC10) on the finisher circuit and the FET (Q1, 2, 3, 4). The CPU (IC10-98,99,100pin) outputs the punch motor (FPNM) drive forward rotation signal, the reverse rotation signal, and the brake signal to control the DC motor.

c. Transmission type sensor circuit

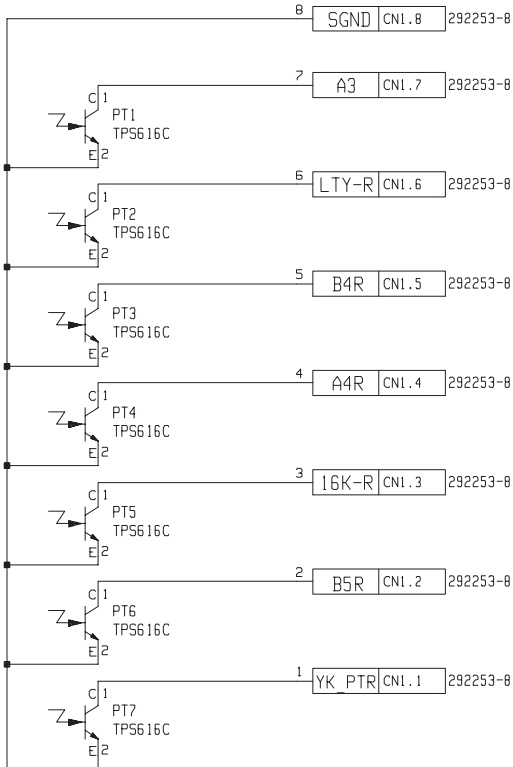
1) LED circuit



This circuit is composed of the paper rear edge sensor (FPPEND) on the inner punch circuit and the light emitting (LED) circuit of the paper horizontal resist sensors (FPPD1 – 6) circuit.

Turning ON/OFF of LED1 – 7 are controlled by the paper rear edge sensor (FPPEND) and the paper horizontal resist sensors (FPPD1 – 6) circuit.

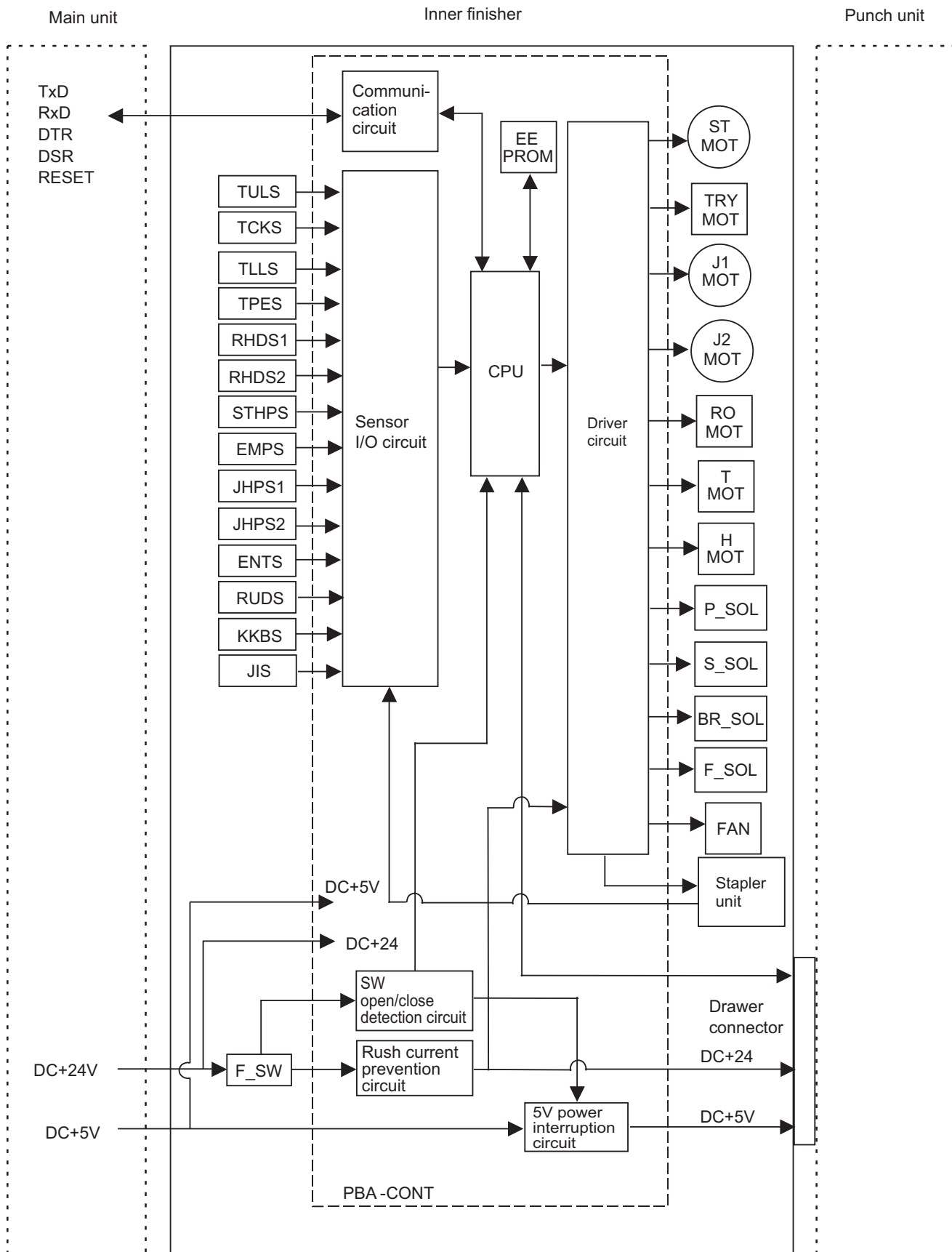
2) Photo transistor (PTR) circuit



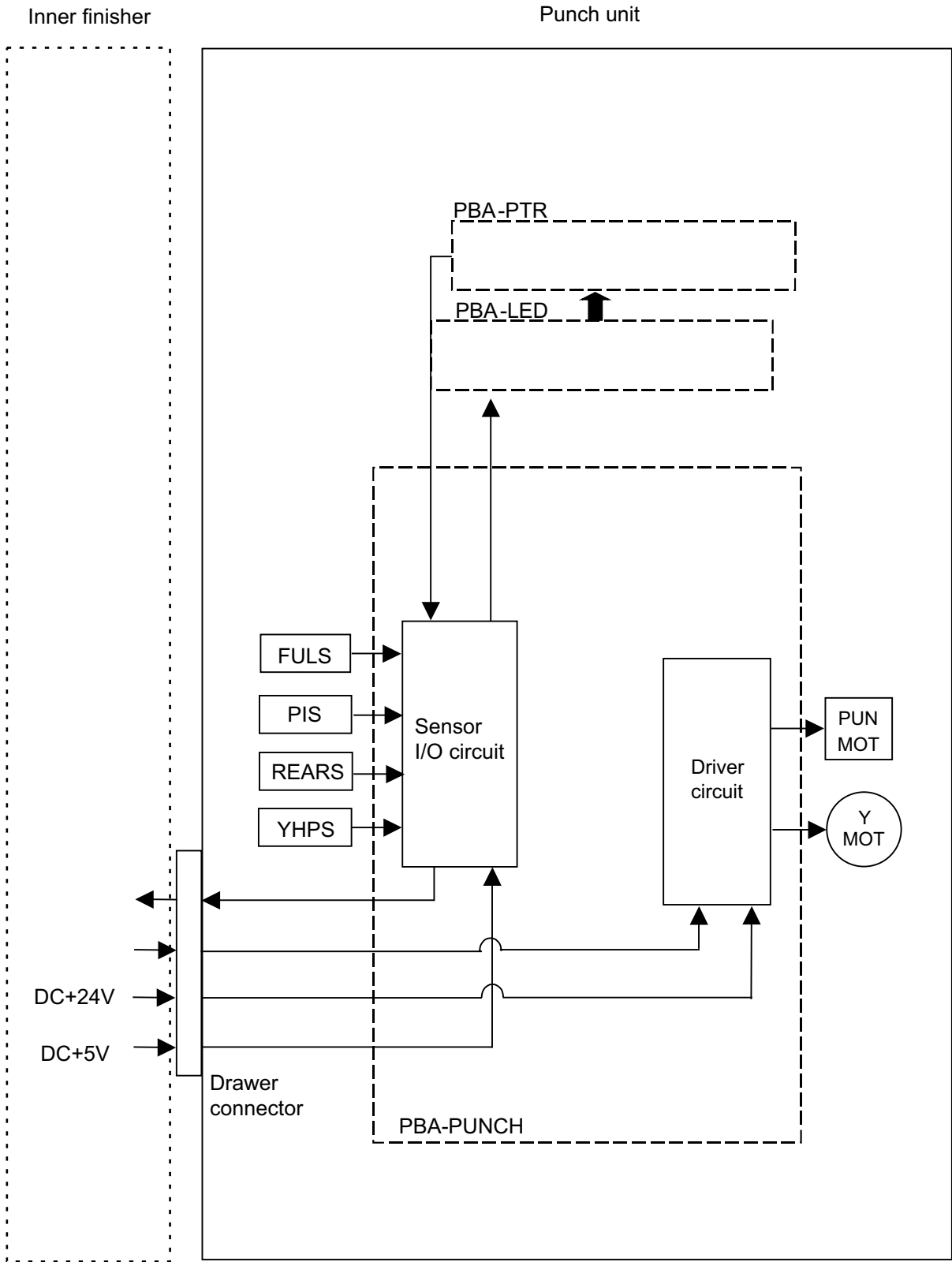
This circuit is the light receiving (PTR) circuit of the paper rear edge sensor (FPPEND) and the paper horizontal resist sensor (FPPD1 – 6) circuit on the inner punch circuit. When light is received from the LED, the collector signal flows through PT1 – 7.

2. Block diagram

A. MX-FNX1

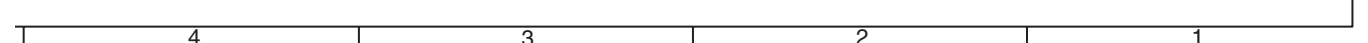


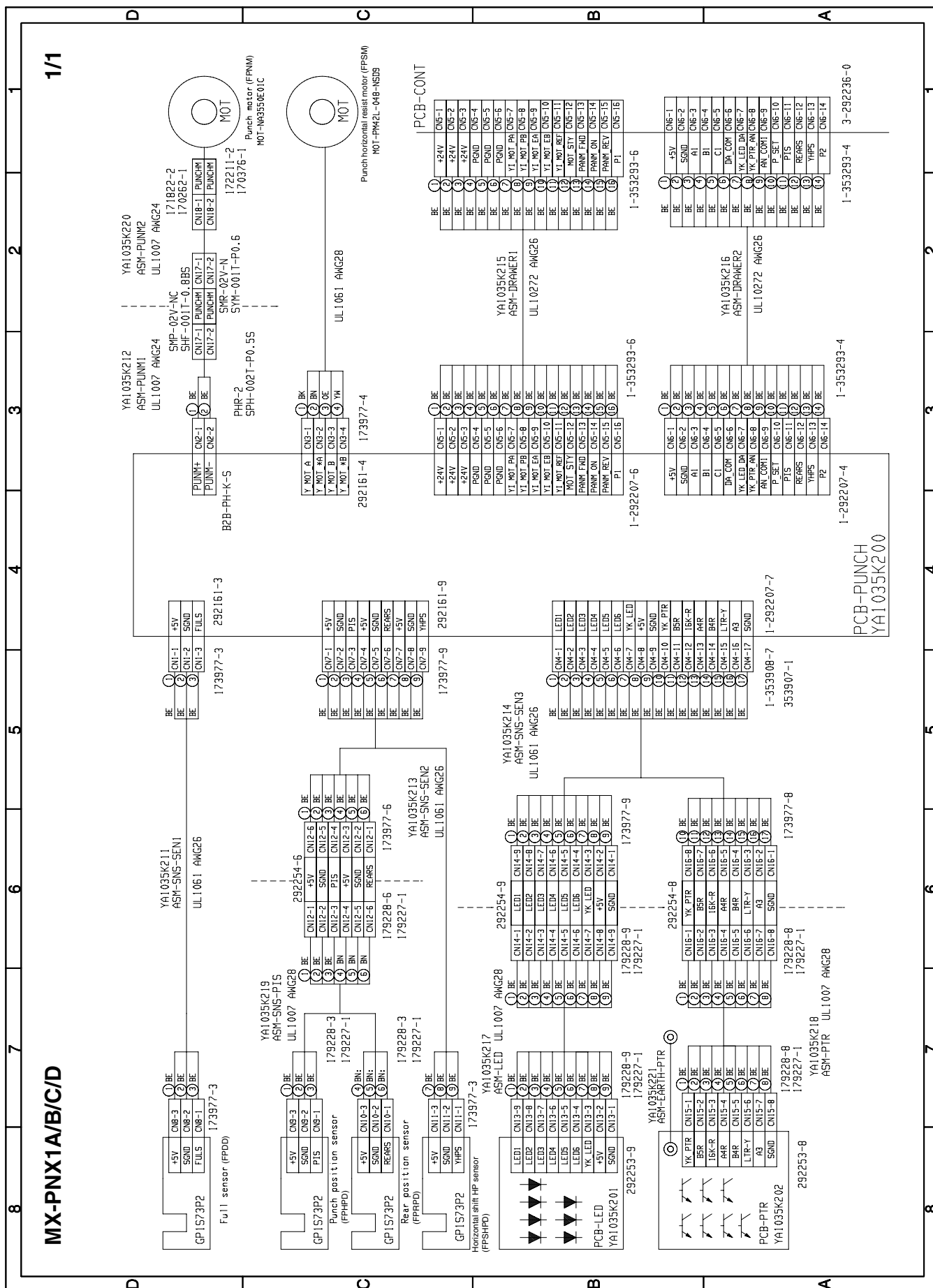
B. MX-PNX1A/B/C/D



A. MX-FNX1







SHARP PARTS GUIDE

MX-FNX1 MX-PNX1A MX-PNX1B MODEL MX-PNX1C MX-PNX1D

このパーツガイドに掲載されている表示価格ランクは消費税抜きです。

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- 4 搬送部 3 (TRANSPORT SECTION 3)
- 5 処理トレイ部 (DISPOSITION TRAY SECTION)
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- 7 スタックトレイユニット (STACK TRAY UNIT)
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- 9 前フレーム部 (FRONT FRAME SECTION)
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補修部品のランク付

市場における補修部品の在庫管理が、適正に運営出来る手助けとなることを、目的とします。

- Aランク：メンテナンスパーツ、メンテナンスパーツには入っていないがメンテナンスパーツに近い消耗パーツ。
- Bランク：性能・機能パーツ（センサー、クラッチ等の電気パーツ）、消耗パーツ。
- Eランク：基板含むユニットパーツ。
- Dランク：整備パーツ（外装、パッキング、同梱パーツ）。
- Cランク：上記ランク以外のパーツ（基板の子部品を除いたもの）。

DEFINITION

- Rank A：Maintenance parts, and consumable parts which are not included in but closely related to maintenance parts
- Rank B：Performance/function parts (sensors, clutches, and other electrical parts), consumable parts
- Rank E：Unit parts including PWB
- Rank D：Preparation parts (External fitting, packing, parts packed together)
- Rank C：Parts other than the above (excluding sub components of PWB)

安全性・信頼性確保のため部品は、必ず正規のものをご使用下さい。

△印の商品は、安全上重要な部品です。交換をする時は、安全及び性能維持のため必ず指定の部品をご使用下さい。

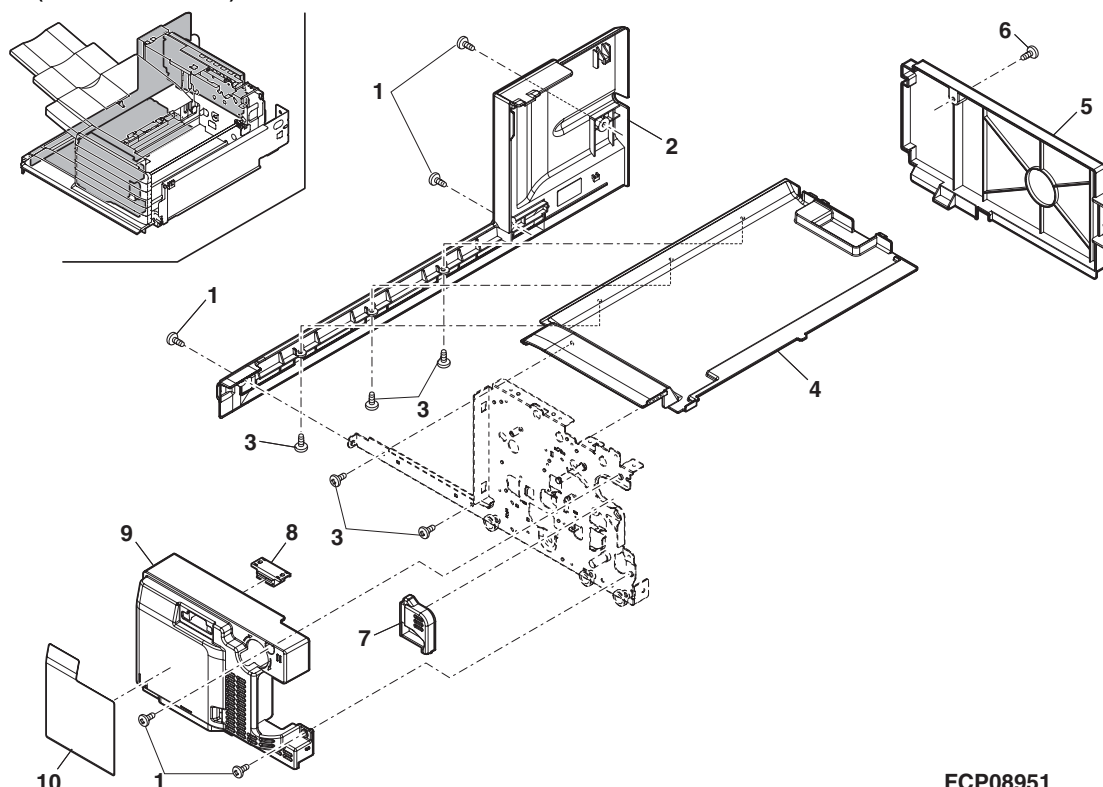
Because parts marked with "△" is indispensable for the machine safety maintenance and operation, it must be replaced with the parts specific to the product specification.

- 当モデルのサービス資料には、この資料以外にサービスマニュアル（回路図含む）があります。合わせてご利用下さい。
- Other than this Parts Guide, please refer to documents Service Manual (including Circuit Diagram) of this model.
- Please use the 13 digit code described in the right hand corner of front cover of the document, when you place an order.
- For U.S. only-Use order codes provided in advertising literature. Do not order from parts department.

1 外装部 (EXTERIORS)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW040060FWB i	AC	DJ	N	C	SCREW ビス
2	0CW4141P025//	BB	GD	N	D	LEFT COVER 左カバー
3	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
4	0CW4141P069//	BB	GD	N	D	TRAY LOWER COVER トレイ下カバー
5	0CW4141P026//	AW	FG	N	D	REAR COVER リアカバー
6	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
7	0CW4141P081//	AG	DX	N	D	RATCH COVER ラッチカバー
8	0CW2214P393//	AG	DX	N	C	MAGNET CATCH マグネットキャッチ
9	0CW4141P042//	BA	FX	N	D	FRONT FIXING COVER フロント固定カバー
10	0CW4141P359//	AS	EZ	N	D	STAPLE REPLACE LABEL 針交換ラベル

1 外装部 (EXTERIORS)

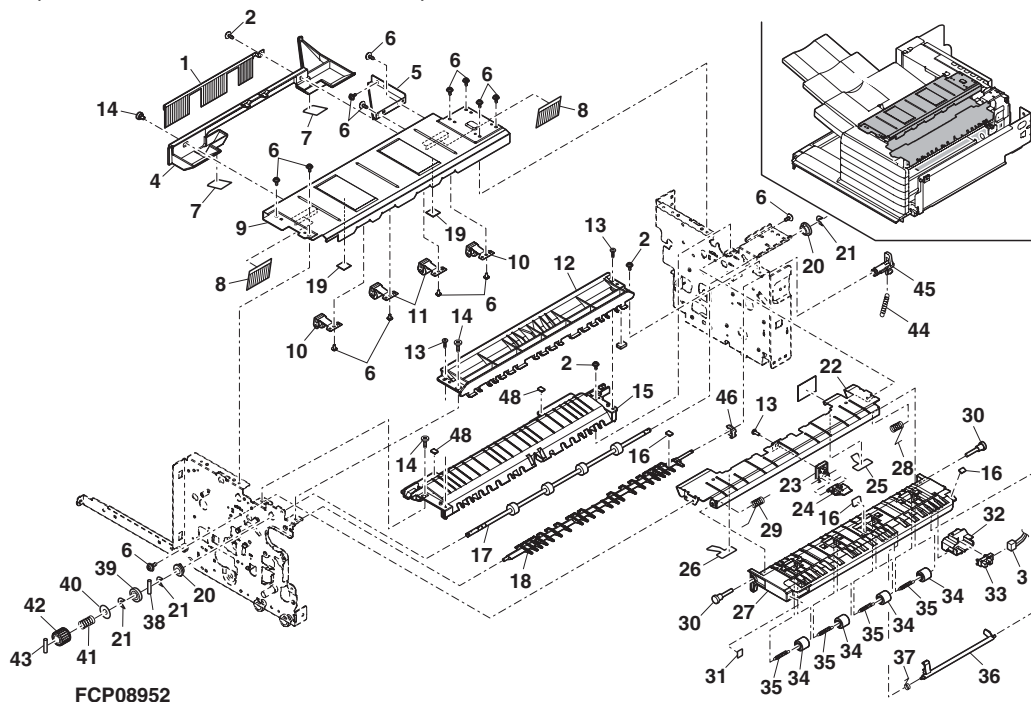


FCP08951

2 搬送部 1(TRANSPORT SECTION 1)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P303//	AS	EQ	N	B	DISCHARGE BRUSH 除電ブラシ
2	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
3	0CW4141K225//	AG	DX	N	C	HARNESSES ハーネス
4	0CW4141P074//	AV	FG	N	D	PAPER EXIT COVER 排紙カバー
5	0CW4141P106//	AK	EB	N	C	TRAY REINFORCE BRACKET トレイ補強ブラケット
6	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
7	0CW4141P389//	AD	DJ	N	C	MYLAR マイラー
8	0CW4141P367//	AS	EQ	N	B	DISCHARGE BRUSH 除電ブラシ
9	0CW4141P100//	AY	FQ	N	C	REVERSE GUIDE 反転ガイド
10	0CW4141K051//	AL	EB	N	E	BELT ROLLER UNIT 1 ベルトユニット-1
11	0CW4141K052//	AL	EB	N	E	BELT ROLLER UNIT 2 ベルトユニット-2
12	0CW4141P017//	AW	FG	N	D	ENTER UPPER GUIDE 入口上ガイド
13	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
14	0CW2205P362//	AC	DJ	N	C	SCREW ビス
15	0CW4141P001//	AZ	FQ	N	D	DELIVERY GUIDE 搬送ガイド
16	0CW4141P330//	AC	DJ	N	C	CUSHION クッション
17	0CW4141P300//	AZ	FX	N	B	DELIVERY ROLLER 搬送ローラー
18	0CW4141P016//	AY	FQ	N	D	ENTER GATE 入口ゲート
19	0CW4141P356//	AC	DJ	N	C	CUSHION クッション
20	0CWNSMTL00007	AK	DX	N	C	BEARING ベアリング
21	0CWNSCLP00005	AE	DJ	N	C	CLIP クリップ
22	0CW4141P101//	AX	FG	N	C	PAPER EXIT GUIDE 排紙ガイド
23	0CW4141P085//	AE	DS	N	C	WEIGHT HOLDER ウェイト用ホルダー
24	0CW4141P086//	AE	DS	N	C	WEIGHT MIDDLE 中央ウェイト
25	0CW4141P371//	AE	DJ	N	C	MYLAR R マイラー R
26	0CW4141P370//	AE	DJ	N	C	MYLAR F マイラー F
27	0CW4141P012//	AY	FQ	N	D	ENTER LOWER GUIDE 入口下ガイド
28	0CW4141P335//	AG	DX	N	C	SPRING R スプリング R
29	0CW4141P317//	AG	DX	N	C	SPRING F スプリング F
30	0CW4141P336//	AG	DS	N	C	SCREW ビス
31	0CW4141P357//	AD	DJ	N	C	OPEN/CLOSE LABEL 開閉ラベル
32	0CW4141P021//	AG	DX	N	C	ENTER SENSOR HOLDER 入口センサーホルダー
33	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
34	0CW4141P010//	AE	DJ	N	C	ENTER ROLLER 入口ローラー
35	0CW4141P338//	AE	DJ	N	C	SPRING スプリング
36	0CW4141P013//	AK	EB	N	C	ENTER SENSOR LEVER 入口センサーレバー
37	0CW4141P311//	AD	DJ	N	C	SPRING スプリング
38	0CW020120SCH/	AA	DD		C	PIN ピン
39	0CW4141P056//	AE	DS	N	C	GEAR ギア
40	0CW2268P076//	AD	DJ		C	FLANGE フランジ
41	0CW4141P365//	AE	DJ	N	C	SPRING スプリング
42	0CW4141P070//	AH	DX	N	C	JAM RELEASE KNOB JAM 解除ノブ
43	0CW020140SCH/	AB	DD		C	PIN ピン
44	0CW4141P316//	AD	DJ	N	C	GATE LEVER SPRING ゲートレバー・スプリング
45	0CW4141P062//	AE	DS	N	C	GATE DRIVE LEVER ゲート駆動レバー
46	0CWNSCLP00008	AE	DJ	N	C	CLIP クリップ
48	0CW4141P356//	AC	DJ	N	C	CUSHION クッション

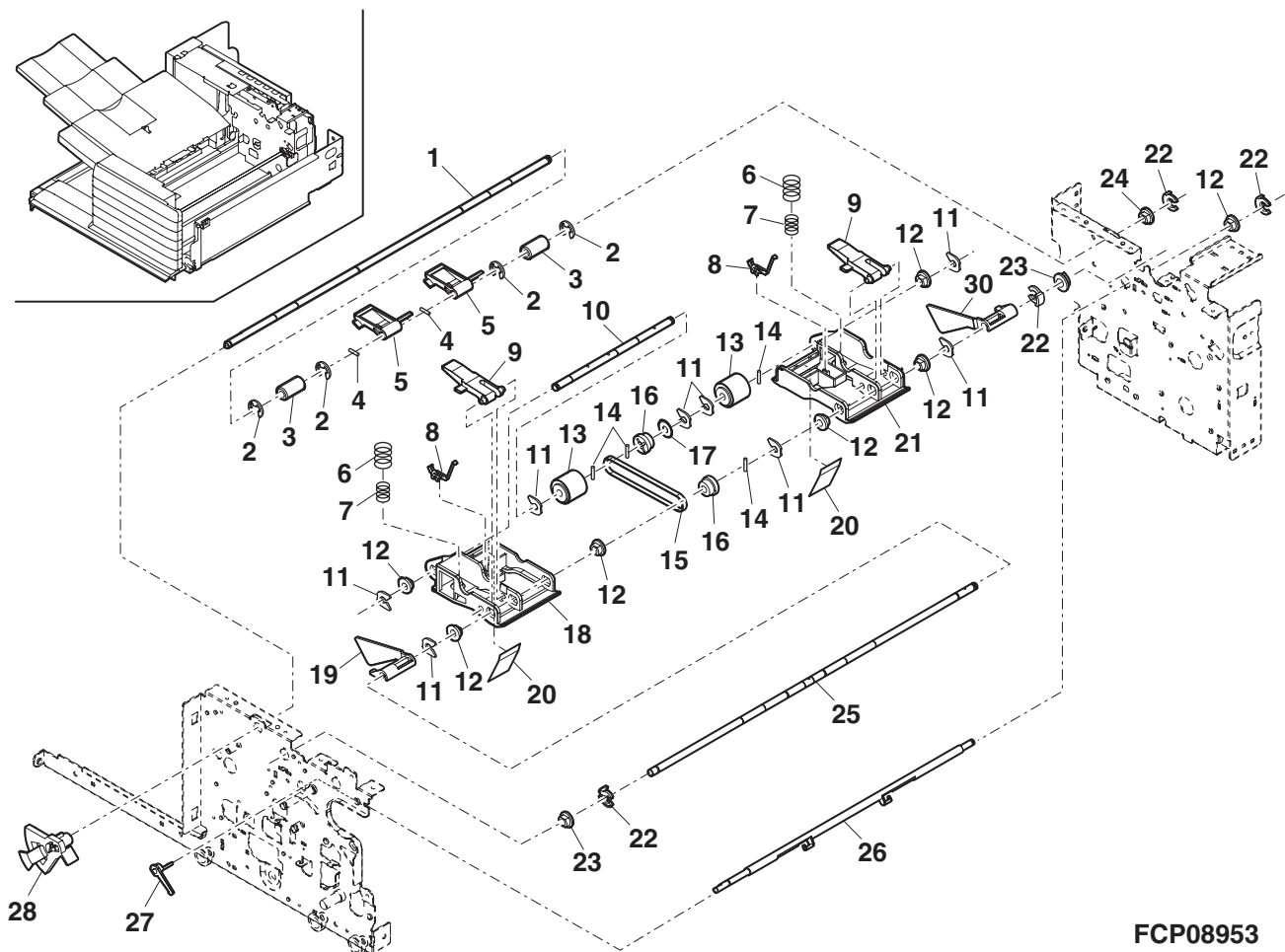
2 搬送部 1(TRANSPORT SECTION 1)



3 搬送部 2(TRANSPORT SECTION 2)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P204//	AW	FG	N	C	BUNCH ROLLER UP/DOWN SHAFT 束出しローラー上下軸
2	0CWER050SKP//	AA	DD		C	E-RING E-リング
3	0CW4141P018//	AE	DS	N	C	TENSION ROLLER テンションローラー
4	0CW020100SCH//	AA	DD		C	PIN ピン
5	0CW4141P011//	AG	DX	N	D	BUNCH ROLLER UP/DOWN LEVER 束出しローラー上下レバー
6	0CW4141P339//	AD	DJ	N	C	SPRING-OUT スプリング (外)
7	0CW4141P304//	AD	DJ	N	C	SPRING-IN スプリング (内)
8	0CW4141P114//	AE	DS	N	C	EARTH PLATE SPRING アース板バネ
9	0CW4141P020//	AG	DS	N	D	BUNCH ROLLER PRESSURE LEVER 束出しローラー加圧レバー
10	0CW4141P202//	AQ	EQ	N	C	BUNCH ROLLER SHAFT 1 束出しローラー軸 1
11	0CWNSCLP00005	AE	DJ	N	C	CLIP クリップ
12	0CWNSBSH00002	AH	DX	N	C	BEARING 軸受け
13	0CW4141P301//	AR	EQ	N	B	PAPER EXIT ROLLER 排紙ローラー
14	0CW020120SCH//	AA	DD		C	PIN ピン
15	0CWNSBLT000086	AR	EQ	N	B	BELT ベルト
16	0CW4141P073//	AE	DS	N	C	PULLEY プーリー
17	0CW2268P076//	AD	DJ		C	FLANGE フランジ
18	0CW4141P009//	AQ	EQ	N	D	FRONT BUNCH ROLLER HOLDER F 手前束出しローラーホルダー-F
19	0CW4141P092//	AK	DX	N	D	WEIGHT-F ウェイトF
20	0CW4141P340//	AH	DX	N	B	DISCHARGE BRUSH 除電ブラシ
21	0CW4141P058//	AQ	EQ	N	D	FRONT BUNCH ROLLER HOLDER R 手前束出しローラーホルダー-R
22	0CWNSCLP00008	AE	DJ	N	C	CLIP クリップ
23	0CWNSMTL00007	AK	DX	N	C	BEARING ベアリング
24	0CWNSMTL00009	AK	DX	N	C	BEARING ベアリング
25	0CW4141P203//	AV	FG	N	C	BUNCH ROLLER SHAFT 2 束出しローラー軸 2
26	0CW4141P002//	AR	EQ	N	C	BELT UP/DOWN SHAFT ベルト上下軸
27	0CW4141P083//	AE	DS	N	C	BELT UP/DOWN LEVER ベルト上下レバー
28	0CW4141P064//	AG	DS	N	C	GEAR ギア
30	0CW4141P093//	AK	DX	N	D	WEIGHT-R ウェイトR

3 搬送部 2(TRANSPORT SECTION 2)

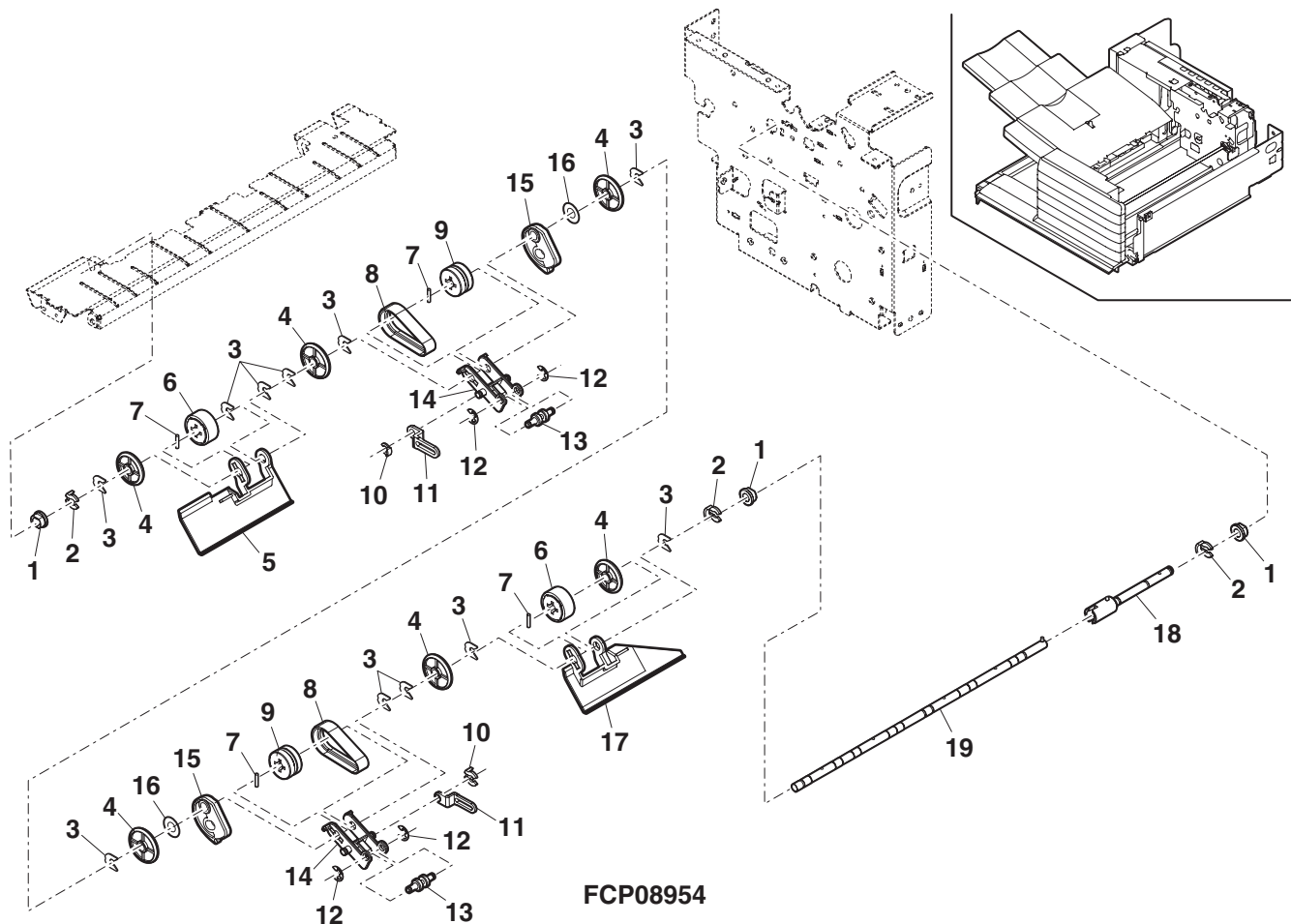


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4 搬送部 3(TRANSPORT SECTION 3)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CWNSMTL00009	AK	DX	N	C	BEARING
2	0CWNSCLP00008	AE	DJ	N	C	CLIP
3	0CWNSCLP00005	AE	DJ	N	C	CLIP
4	0CW4141P051//	AD	DJ	N	C	ROLLER
5	0CW4141P077//	AG	DS	N	D	PAPER GUIDE-F
6	0CW4141P007//	AR	EQ	N	B	PAPER EXIT ROLLER
7	0CW020100SCH/	AA	DD	N	C	PIN
8	0CW4141P372//	AY	FQ	N	B	BELT
9	0CW4141P008//	AF	DS	N	C	BELT DRIVE ROLLER
10	0CWNSCLP00003	AE	DJ	N	C	CLIP
11	0CW4141P003//	AE	DJ	N	C	BELT UP/DOWN LEVER
12	0CWER030SKP//	AA	DD	N	C	E-RING
13	0CW4143P225//	AY	FQ	N	C	BELT SHAFT
14	0CW4141P006//	AG	DS	N	C	BELT HOLDER
15	0CW4141P091//	AF	DS	N	C	BELT GUIDE
16	0CWHW060FNSN/	AC	DJ	N	C	WASHER
17	0CW4141P078//	AG	DX	N	D	PAPER GUIDE-R
18	0CW4141K023//	AQ	EQ	N	E	BELT DRIVE SHAFT UNIT 1
19	0CW4141K025//	AV	FG	N	E	BELT DRIVE SHAFT UNIT 2

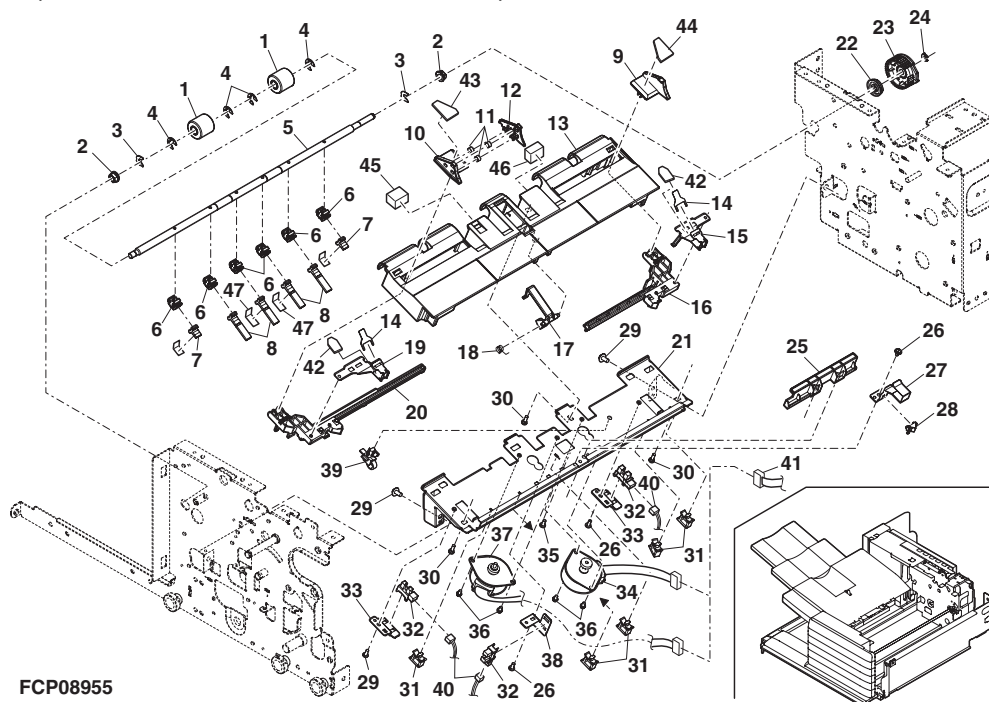
4 搬送部 3(TRANSPORT SECTION 3)



5 処理トレイ部 (DISPOSITION TRAY SECTION)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P411//	AH	DX	N	C	SUB ROLLER 従動ローラー
2	0CWNSMTL00009	AK	DX	N	C	BEARING ベアリング
3	0CWNSCLP00005	AE	DJ	N	C	CLIP クリップ
4	0CWER070SKP//	AA	DD		C	E-RING E-リング
5	0CW4141P229//	BA	FX	N	C	PADDLE FIXING SHAFT パドル固定軸
6	0CW4141P412//	AE	DJ	N	C	PADDLE HOLDER パドルホルダー
7	0CW4141P354//	AN	EG	N	B	PADDLE (S) パドル (小)
8	0CW4141P320//	AM	EG	N	B	PADDLE パドル
9	0CW4141P416//	AG	DS	N	D	REGULATION PLATE R 整合板 R
10	0CW4141P414//	AG	DS	N	D	REGULATION PLATE F-1 整合板 F-1
11	0CW4141P323//	AC	DJ	N	C	SPRING スプリング
12	0CW4141P415//	AE	DS	N	D	REGULATION PLATE F-2 整合板 F-2
13	0CW4141P413//	BF	GN	N	D	DISPOSITION TRAY 処理トレイ
14	0CW4141P321//	AC	DJ	N	C	MYLAR マイラー
15	0CW4141P152//	AR	EQ	N	C	PAPER STOPPER R 用紙ストップバー R
16	0CW4141P420//	AK	DX	N	D	RACK GEAR R ラックギア R
17	0CW4141P417//	AE	DS	N	D	SENSOR LEVER センサーレバー
18	0CW4141P322//	AD	DJ	N	C	SPRING スプリング
19	0CW4141P150//	AR	EQ	N	C	PAPER STOPPER F 用紙ストップバー F
20	0CW4141P419//	AL	EB	N	D	RACK GEAR F ラックギア F
21	0CW4141P146//	AX	FG	N	C	REGULATION BRACKET 整合ブラケット
22	0CW4102P308//	AE	DJ	N	C	GEAR HOLDER ギアホルダー
23	0CW4141P066//	AK	DX	N	C	GEAR ギア
24	0CWNSCLP00003	AE	DJ	N	C	CLIP クリップ
25	0CW4141P418//	AG	DX	N	D	GEAR FIXING BASE ギア押えベース
26	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
27	0CW4141P151//	AL	EB	N	C	MIDDLE PAPER STOPPER 中央用紙ストップバー
28	0CW4141P404//	AE	DJ	N	C	SENSOR CAM センサー用カム
29	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
30	0CWNSSCR00214	AE	DJ	N	C	SCREW ビス
31	0CWE450001148	AE	DS	N	C	CLAMP クランプ
32	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
33	0CW4141P149//	AF	DS	N	C	SENSOR BRACKET センサーブラケット
34	0CW4141P528//	BF	GN	N	B	REGULATION MOTOR 2 整合モーター 2
35	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
36	0CW030060FWSW	AC	DJ	N	C	SCREW ビス
37	0CW4141P527//	BF	GN	N	B	REGULATION MOTOR 1 整合モーター 1
38	0CW4141P147//	AE	DS	N	C	SENSOR BRACKET センサーブラケット
39	0CWE450001128	AC	DJ		C	BAND バンド
40	0CW4141K214//	AQ	EQ	N	C	HARNESS ハarness
41	0CW4141K222//	AR	EQ	N	C	HARNESS ハarness
42	0CW4141P366//	AG	DX	N	C	SHEET シート
43	0CW4141P376//	AD	DJ	N	C	MYLAR マイラー
44	0CW4141P377//	AD	DJ	N	C	MYLAR マイラー
45	0CW4141P392//	AE	DS	N	C	PAD パッド
46	0CW4141P391//	AD	DJ	N	C	PAD パッド
47	0CW4141P385//	AF	DS	N	C	MYLAR-L マイラー-L

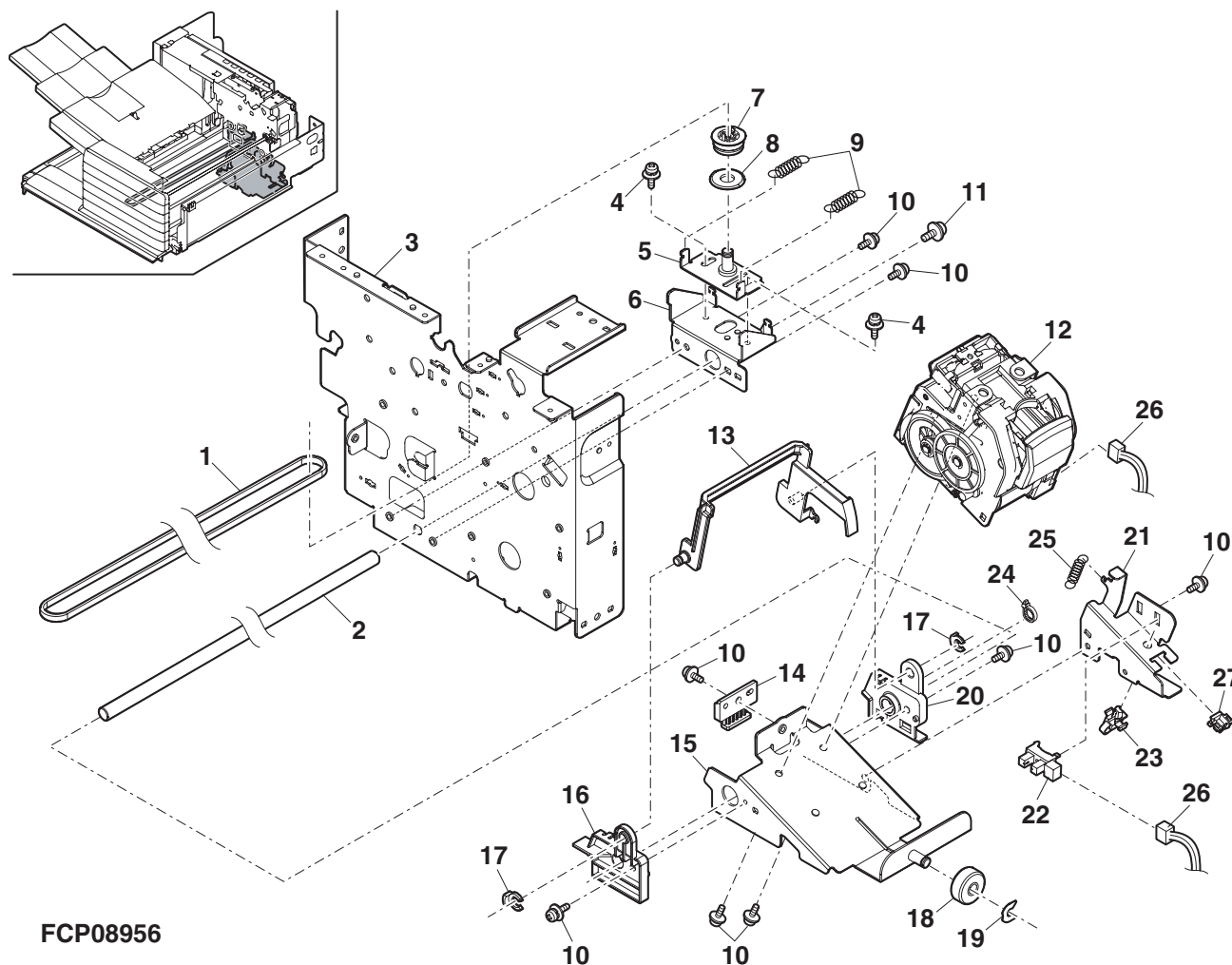
5 処理トレイ部 (DISPOSITION TRAY SECTION)



6 スタイプル部 (STAPLE SECTION)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CWNSBLT00342	AW	FG	N	B	BELT ベルト
2	0CW4141P225//	AW	FG	N	C	STAPLE MOVE SHAFT スタイプル移動軸
3	0CW4141K011//	BA	FX	N	C	SIDE PLATE R(INSIDE) 側板 R(内側)
4	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
5	0CW4141K020//	AL	EB	N	C	STAPLE BELT ADJUSTMENT PLATE スタイプルベルト調整板
6	0CW4141P138//	AK	EB	N	C	STAPLE DRIVE BRACKET スタイプル駆動ブラケット
7	0CW4141P034//	AE	DS	N	C	PULLEY プーリー
8	0CW4099P769//	AD	DJ	N	C	FLANGE フランジ
9	0CW4141P319//	AD	DJ	N	C	SPRING スプリング
10	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
11	0CW040080FWWS	AC	DJ	N	C	SCREW ビス
12	0CW4141P520//	CQ	VJ	N	E	STAPLER ステープラー
13	0CW4141P410//	AG	DX	N	C	SENSOR LEVER センサーレバー
14	0CW4141P405//	AE	DS	N	C	BELT HOLDER ベルトホルダー
15	0CW4141P137//	AS	EQ	N	C	STAPLE BRACKET スタイプルブラケット
16	0CW4141P424//	AF	DS	N	C	STAPLE HOLDER F スタイプルホルダー F
17	0CWNSCLP00003	AE	DJ	N	C	CLIP クリップ
18	0CW4141P427//	AE	DJ	N	C	ROLLER コロ
19	0CWNSCLP00005	AE	DJ	N	C	CLIP クリップ
20	0CW4141P425//	AF	DS	N	C	STAPLE HOLDER R スタイプルホルダー R
21	0CW4141P144//	AK	EB	N	C	STAPLE SENSOR BRACKET スタイプルセンサーブラケット
22	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
23	0CWE450001128	AC	DJ	N	C	BAND バンド
24	0CWE450001174	AC	DJ	N	C	CLAMP クランプ
25	0CW4141P325//	AD	DJ	N	C	SPRING スプリング
26	0CW4141K219//	BB	GD	N	C	HARNESS ハーネス
27	0CWE450000842	AC	DJ	N	C	EDGE SADDLE エッジサドル

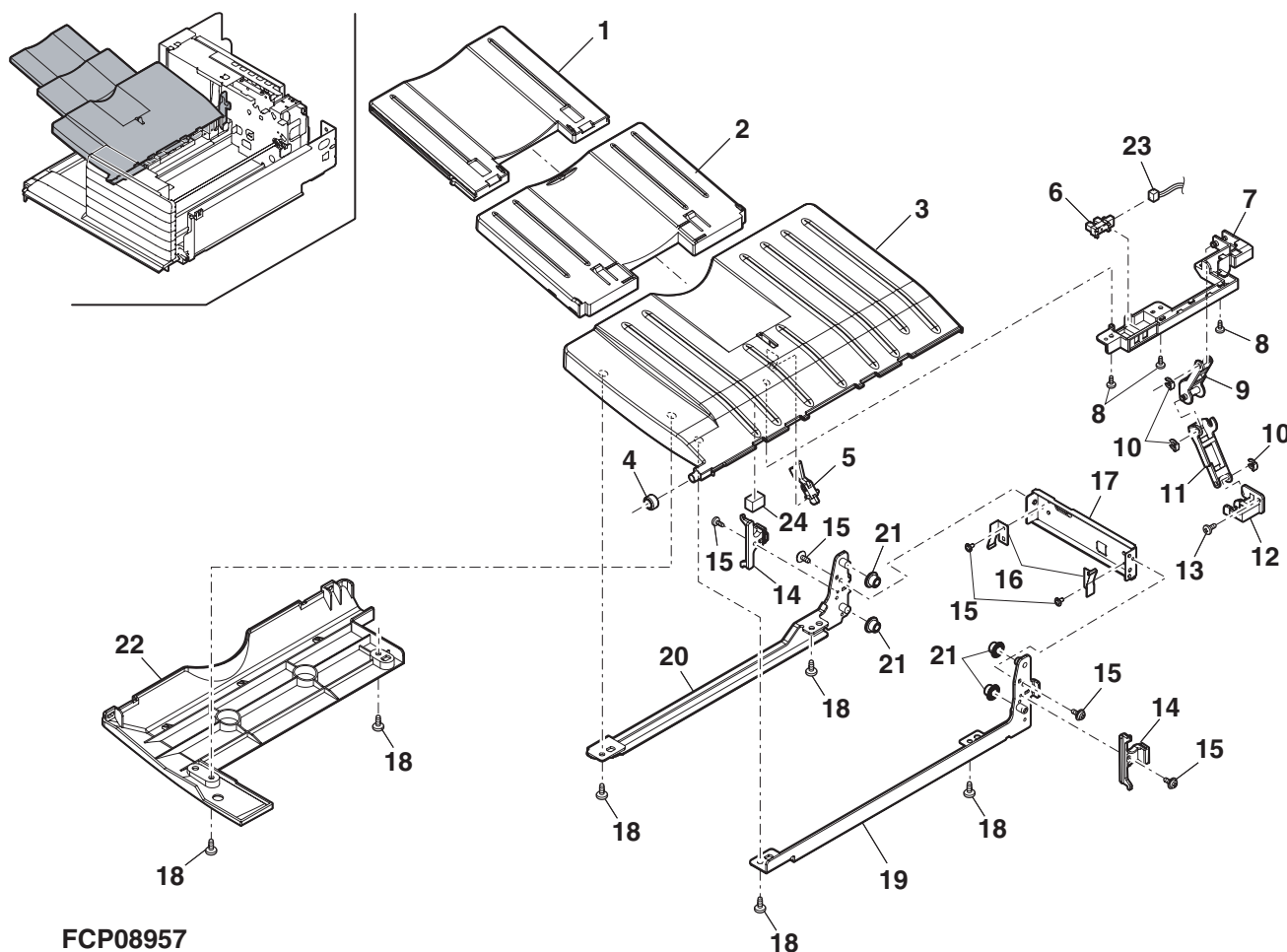
6 スタイプル部 (STAPLE SECTION)



7 スタックトレイユニット (STACK TRAY UNIT)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P024//	AW	FG	N	D	DRAWER TRAY 2 引き出しトレイ2
2	0CW4141P023//	AY	FQ	N	D	DRAWER TRAY 1 引き出しトレイ1
3	0CW4141P022//	BN	HV	N	D	TRAY UPPER COVER トレイ上カバー
4	0CW4141P037//	AE	DJ	N	C	ROLLER コロ
5	0CW4141P090//	AH	DX	N	D	TRAY SENSOR LEVER トレイセンサーレバー
6	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
7	0CW4141P029//	AK	EB	N	D	TRAY HARNESS GUIDE 2 トレイハーネスガイド 2
8	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
9	0CW4141P031//	AF	DS	N	D	TRAY HARNESS GUIDE 4 トレイハーネスガイド 4
10	0CWNSCLP00003	AE	DJ	N	C	CLIP クリップ
11	0CW4141P030//	AF	DS	N	D	TRAY HARNESS GUIDE 3 トレイハーネスガイド 3
12	0CW4141P028//	AF	DS	N	D	TRAY HARNESS GUIDE 1 トレイハーネスガイド 1
13	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
14	0CW4141P033//	AF	DS	N	D	TRAY BELT HOLDER トレイベルトホルダー
15	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
16	0CW4141P121//	AG	DX	N	C	EARTH PLATE SPRING アース板バネ
17	0CW4141P109//	AN	EG	N	C	TRAY BELT BRACKET トレイベルトブラケット
18	0CWNSSCR00056	AC	DJ	N	C	SCREW ビス
19	0CW4141K054//	BA	FX	N	C	TRAY BELT STAY R トレイベルトステイ後
20	0CW4141K079//	AY	FQ	N	C	TRAY BELT STAY F トレイベルトステイ前
21	0CW4141P032//	AD	DJ	N	C	TRAY UP/DOWN ROLLER トレイ昇降コロ
22	0CW4141P019//	AZ	FQ	N	D	TRAY LOWER COVER トレイ下カバー
23	0CW4141K212//	AN	EG	N	C	HARNESS ハーネス
24	0CW4141P331//	AF	DS	N	C	CUSHION クッション

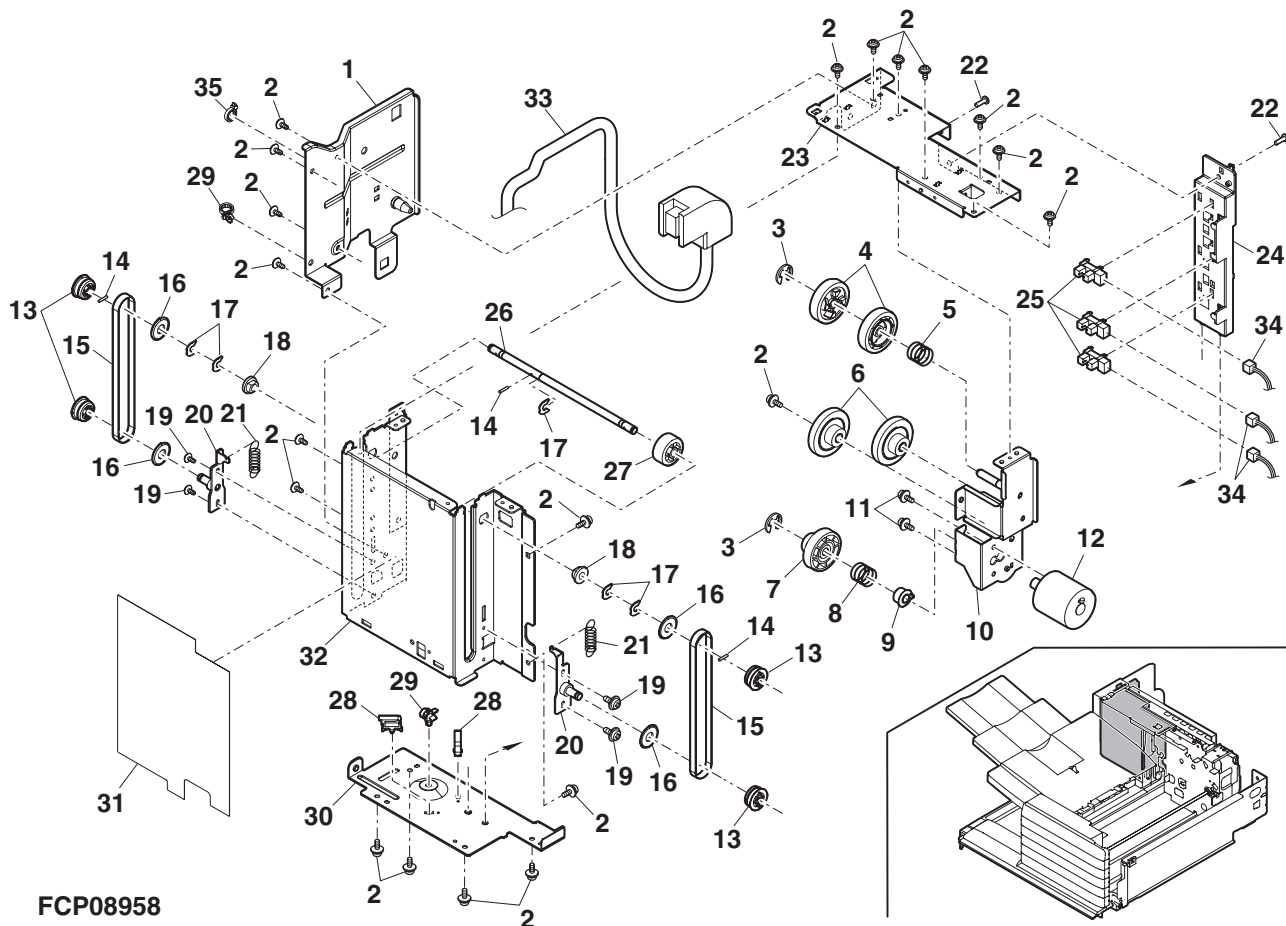
7 スタックトレイユニット (STACK TRAY UNIT)



8 スタックトレイ駆動部 (STACK TRAY DRIVE SECTION)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P115//	AU	EZ	N	C	TRAY LEFT BRACKET トレイ左フ ラケット
2	0CW030060FWTP	AC	DJ	N	C	SCREW ビ ス
3	0CWER050SKP//	AA	DD		C	E-RING E- リング
4	0CW4141P036//	AG	DS	N	C	GEAR ギ ア
5	0CW4141P312//	AE	DJ	N	C	SPRING ス プ リング
6	0CW4141P055//	AF	DS	N	C	GEAR ギ ア
7	0CW4141P054//	AE	DS	N	C	GEAR ギ ア
8	0CW4141P342//	AG	DX	N	C	SPRING ス プ リング
9	0CW4141P040//	AE	DS	N	C	TRAY TORQUE LIMITER トレイトルクリミッター
10	0CW4141K062//	AT	EZ	N	C	TRAY DRIVE BRACKET トレイ駆動フ ラケット
11	0CW030050FWWS	AC	DJ	N	C	SCREW ビ ス
12	0CW4141P525//	BF	GN	N	B	TRAY MOTOR トレイモーター
13	0CW4141P034//	AE	DS	N	C	PULLEY プ ー リー
14	0CW020120SCH	AA	DD		C	PIN ピ ン
15	0CWNSBLT00343	AW	FG	N	B	BELT ベ ル ト
16	0CW4099P769//	AD	DJ	N	C	FLANGE フ ランジ
17	0CWNSCLP00005	AE	DJ	N	C	CLIP ク リップ
18	0CWNSMTL00009	AK	DX	N	C	BEARING ベ ア リング
19	0CW030060FWSW	AC	DJ	N	C	SCREW ビ ス
20	0CW4141K059//	AL	EB	N	C	TRAY BELT TENSION BRACKET トレイベ ル トテンションフ ラケット
21	0CW4141P306//	AE	DS	N	C	SPRING ス プ リング
22	0CW030060FWWS	AC	DJ	N	C	SCREW ビ ス
23	0CW4141P103//	AR	EQ	N	C	TRAY UPPER BRACKET トレイ上フ ラケット
24	0CW4141P027//	AN	EG	N	D	TRAY SENSOR HOLDER トレイセンサーホルダー
25	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
26	0CW4141P211//	AR	EQ	N	C	TRAY UP/DOWN SHAFT トレイ上下軸
27	0CW4141P035//	AE	DS	N	C	GEAR ギ ア
28	0CWE450001139	AC	DJ		C	CLAMP ク ランプ
29	0CWE450001128	AC	DJ		C	BAND バ ンド
30	0CW4141P104//	AP	EQ	N	C	TRAY LOWER BRACKET トレイ下フ ラケット
31	0CW4141P352//	AQ	EQ	N	C	COLORING PLATE 着色フ レート
32	0CW4141P102//	BA	FX	N	C	TRAY BRACKET トレイフ ラケット
33	0CW4141K210//	BH	HC	N	E	I/F HARNESS I/F ハーネス
34	0CW4141K211//	AN	EQ	N	C	HARNESS ハーネス
35	0CWE450001174	AC	DJ	N	C	CLAMP ク ランプ

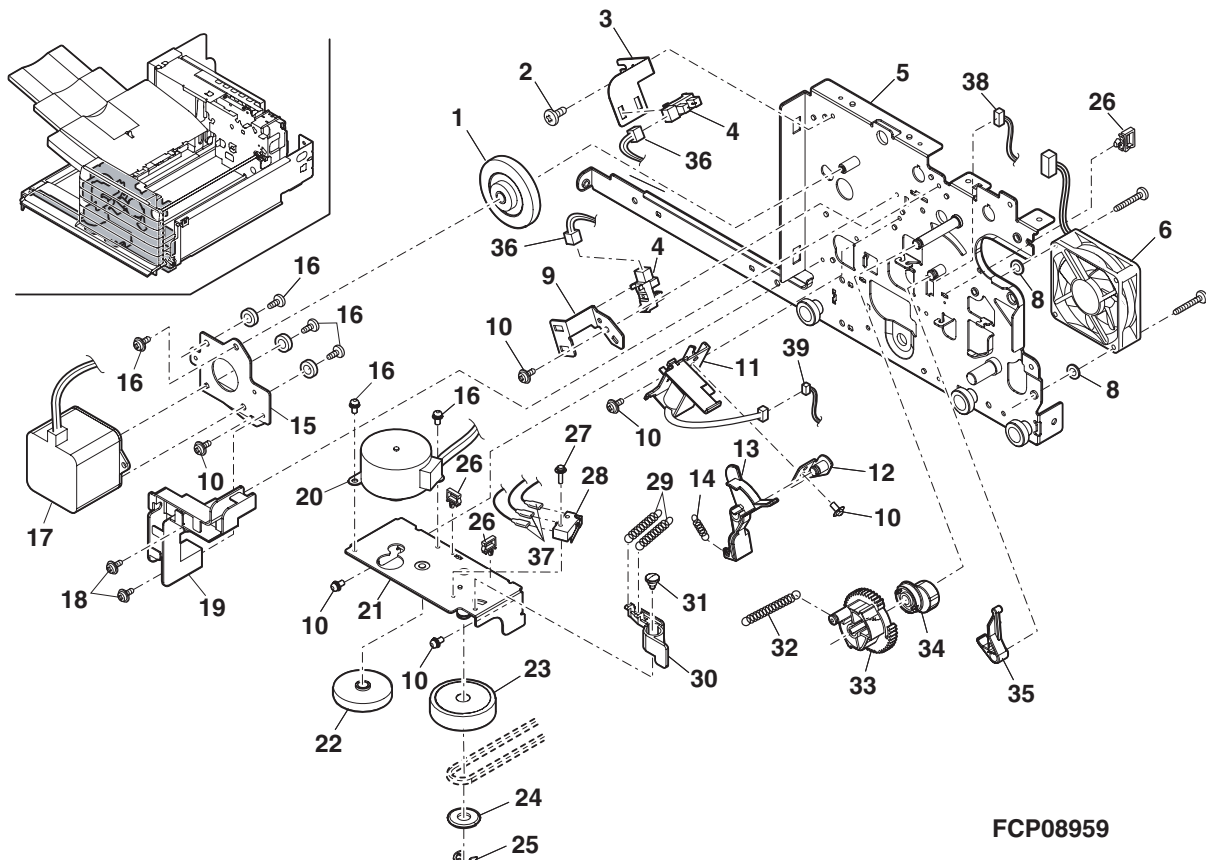
8 スタックトレイ駆動部 (STACK TRAY DRIVE SECTION)



9 前フレーム部 (FRONT FRAME SECTION)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P059//	AG	DS	N	C	GEAR ギア
2	0CWNSSCR00016	AC	DJ	N	C	SCREW ビス
3	0CW4141P145//	AF	DS	N	C	SENSOR BRACKET センサーラケット
4	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
5	0CW4141K007//	BB	GD	N	C	SIDE PLATE F 側板 F
6	0CW4141P530//	BG	GT	N	B	FAN MOTOR ファンモーター
8	0CWHW060FNSN//	AC	DJ	N	C	WASHER ワッシャー
9	0CW4141P132//	AF	DS	N	C	SENSOR BRACKET センサーラケット
10	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
11	0CW4141P524//	AY	FQ	N	B	BELT ALIENATION SOLENOID ベルト離間ソレノイド
12	0CW4141K040//	AG	DX	N	C	BELT DRIVE BRACKET ベルト駆動ブラケット
13	0CW4141P060//	AF	DS	N	C	BELT UP/DOWN LEVER ベルト上下レバー
14	0CW4141P341//	AC	DJ	N	C	SPRING スプリング
15	0CW4141P136//	AK	EB	N	C	MOTOR BRACKET モーターブラケット
16	0CW030060FWSW	AC	DJ	N	C	SCREW ビス
17	0CW4141K232//	BL	HL	N	B	ROLLER UP/DOWN MOTOR ローラー上下モーター
18	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
19	0CW4141P049//	AN	EQ	N	D	HARNESS GUIDE ハーネスガイド
20	0CW4141P526//	BE	GN	N	B	STAPLE TRANSFER MOTOR ステープラー移動モーター
21	0CW4141K078//	AR	EQ	N	C	STAPLE DRIVE BRACKET ステープラ駆動ブラケット
22	0CW4141P408//	AF	DS	N	C	GEAR ギア
23	0CW4141P409//	AF	DS	N	C	GEAR ギア
24	0CW4099P769//	AD	DJ	N	C	FLANGE フランジ
25	0CWER070SKP//	AA	DD		C	E-RING E-リング
26	0CWE450001146	AC	DJ		C	CLAMP クランプ
27	0CW023100FNWS	AC	DJ		C	SCREW ビス
28	0CWE120001784	AY	FQ	N	B	FRONT COVER SWITCH 前カバースイッチ
29	0CW4141P308//	AD	DJ	N	C	SPRING スプリング
30	0CW4141P014//	AE	DS	N	D	INTER LOCK SENSOR LEVER インターロックセンサーレバー
31	0CW2171P609//	AD	DJ	N	C	SCREW ビス
32	0CW4141P314//	AE	DS	N	C	SPRING スプリング
33	0CW4141P052//	AK	DX	N	C	GEAR ギア
34	0CW4141P053//	AE	DS	N	C	CAM カム
35	0CW4141P087//	AE	DS	N	C	BELT UP/DOWN LEVER ベルト上下レバー
36	0CW4141K215//	AR	EQ	N	C	HARNESS ハーネス
37	0CW4141K216//	AR	EQ	N	C	HARNESS ハーネス
38	0CW4141K227//	AK	DX	N	C	HARNESS ハーネス
39	0CW4141K220//	AQ	EQ	N	C	HARNESS ハーネス

9 前フレーム部 (FRONT FRAME SECTION)

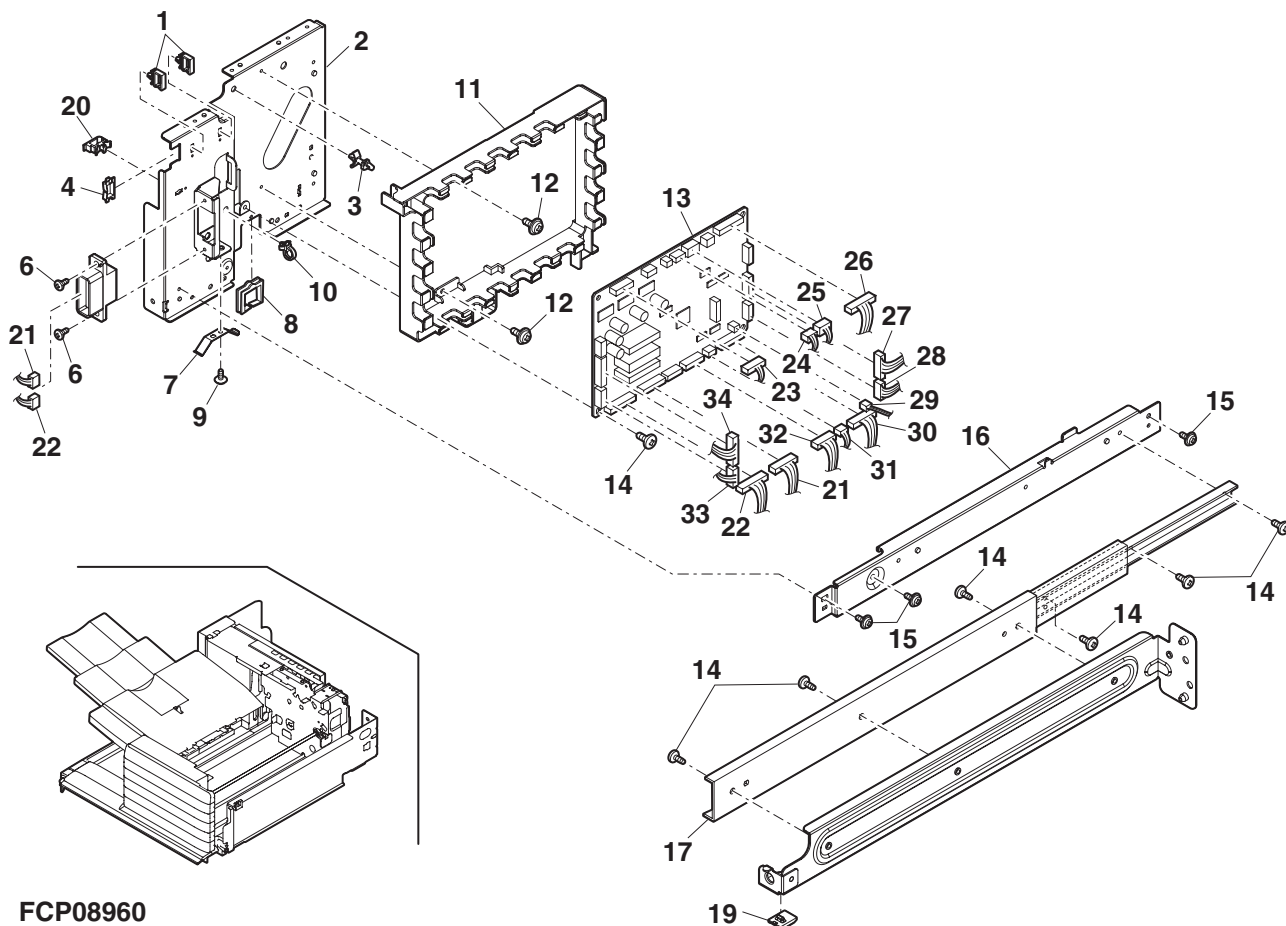


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10 後フレーム部 1(REAR FRAME SECTION 1)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CWE450001139	AC	DJ		C	CLAMP クランプ
2	0CW4141P118//	AZ	FQ	N	C	PLATE R プレートR
3	0CWE450000437	AB	DD		C	PWB SUPPORT 基板サポ-ト
4	0CWE450000433	AB	DD		C	EDGE SADDLE エッジサドル
6	0CW4051P361//	AC	DJ		C	SCREW ビ-ス
7	0CW4141P122//	AF	DS	N	C	EARTH PLATE SPRING ア-ス板バネ
8	0CWE450000566	AE	DJ		C	EDGE SADDLE エッジサドル
9	0CWNSSCR00016	AC	DJ	N	C	SCREW ビ-ス
10	0CWE450001128	AC	DJ		C	BAND バ-ント
11	0CW4141P048//	AW	FG	N	D	PWB HARNESS GUIDE 基板ハ-ネスガイ-ド
12	0CW030060FWWS	AC	DJ	N	C	SCREW ビ-ス
13	0CW4141K201//	CN	UZ	N	E	CONTROL PWB コントロ-ル基板
14	0CW040060FWB i	AC	DJ	N	C	SCREW ビ-ス
15	0CW030060FWTP	AC	DJ	N	C	SCREW ビ-ス
16	0CW4141P123//	AS	EQ	N	C	SLIDER FIXING BRACKET スライダ-固定ブ-ラケット
17	0CW4141P307//	BD	GN	N	E	SLIDE RAIL スライドレ-ル
19	0CW4141P039//	AE	DJ	N	C	SLIDING SPACER 摺動スペ-サ-
20	0CWE450001140	AC	DJ		C	CLAMP クランプ
21	0CW4141K217//	AR	EQ	N	C	HARNESS ハ-ネス
22	0CW4141K218//	AR	EQ	N	C	HARNESS ハ-ネス
23	0CW4141K222//	AR	EQ	N	C	HARNESS ハ-ネス
24	0CW4141K227//	AK	DX	N	C	HARNESS ハ-ネス
25	0CW4141K216//	AR	EQ	N	C	HARNESS ハ-ネス
26	0CW4141K219//	BB	GD	N	C	HARNESS ハ-ネス
27	0CW4141K215//	AR	EQ	N	C	HARNESS ハ-ネス
28	0CW4141K213//	AL	EB	N	C	HARNESS ハ-ネス
29	0CW4141K224//	AK	DX	N	C	HARNESS ハ-ネス
30	0CW4141K214//	AQ	EQ	N	C	HARNESS ハ-ネス
31	0CW4141K212//	AN	EG	N	C	HARNESS ハ-ネス
32	0CW4141K211//	AN	EQ	N	C	HARNESS ハ-ネス
33	0CW4141K220//	AQ	EQ	N	C	HARNESS ハ-ネス
34	0CW4141K223//	AR	EQ	N	C	HARNESS ハ-ネス

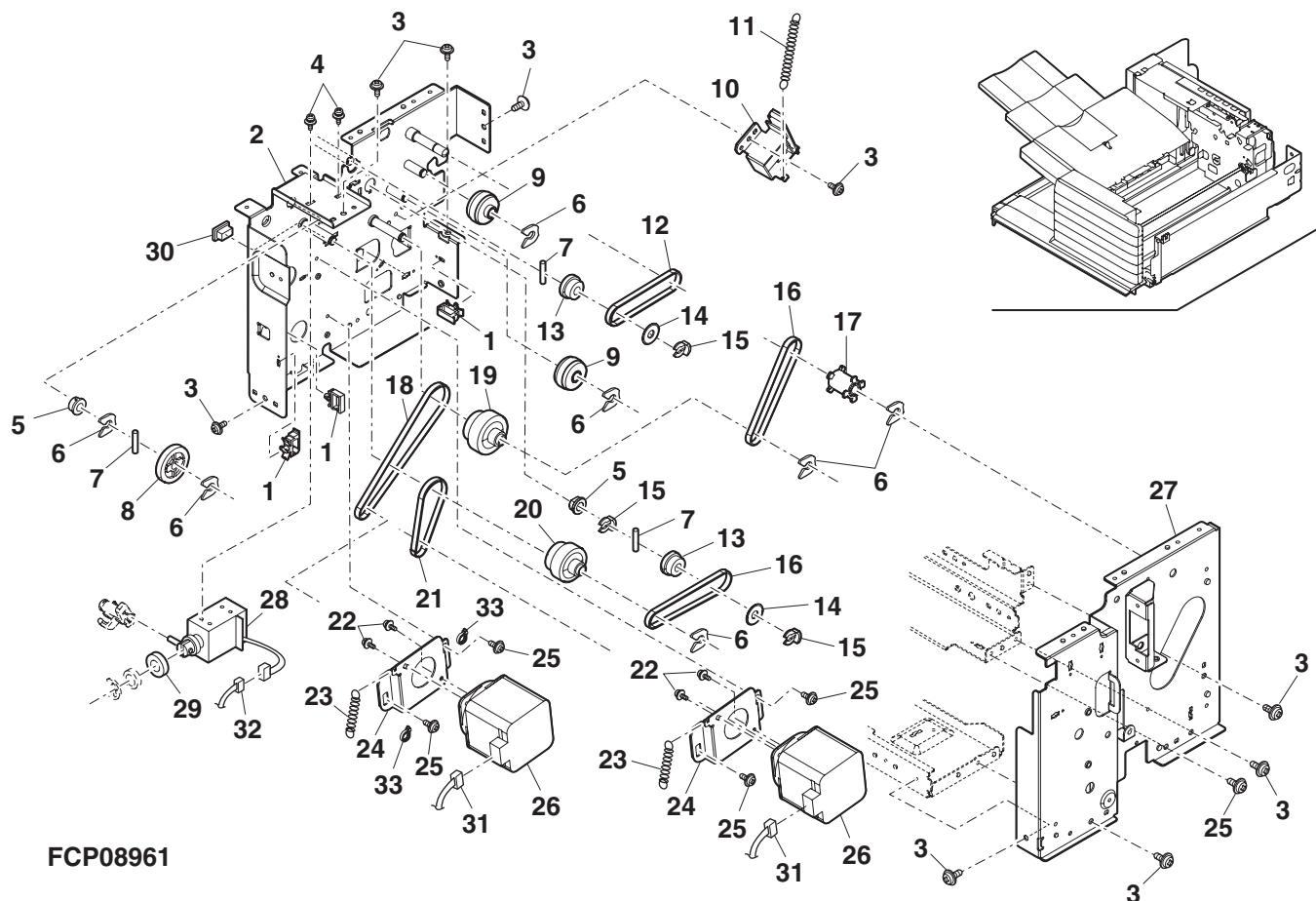
10 後フレーム部 1(REAR FRAME SECTION 1)



11 後フレーム部 2(REAR FRAME SECTION 2)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CWE450001139	AC	DJ		C	CLAMP クランプ
2	0CW4141K011//	BA	FX	N	C	SIDE PLATE R(INSIDE) 側板 R(内側)
3	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
4	0CW030050FWWS	AC	DJ	N	C	SCREW ビス
5	0CWNSMTL00007	AK	DX	N	C	BEARING ベアリング
6	0CWNSCLP00005	AE	DJ	N	C	CLIP クリップ
7	0CW020120SCH//	AA	DD		C	PIN ピン
8	0CW4141P056//	AE	DS	N	C	GEAR ギア
9	0CW4141P065//	AE	DS	N	C	GEAR ギア
10	0CW4141P523//	AY	FQ	N	B	SOLENOID ソレノイド
11	0CW4141P326//	AE	DJ	N	C	SPRING スプリング
12	0CWBLT00068//	AR	EQ		B	BELT ベルト
13	0CW4141P073//	AE	DS	N	C	PULLEY プーリー
14	0CW2268P076//	AD	DJ		C	FLANGE フランジ
15	0CWNSCLP00008	AE	DJ	N	C	CLIP クリップ
16	0CWNSBLT00211	AR	EQ	N	B	BELT ベルト
17	0CW4141P072//	AE	DS	N	C	PULLEY プーリー
18	0CWNSBLT00309	AS	EQ	N	B	BELT ベルト
19	0CW4141P076//	AF	DS	N	C	PULLEY プーリー
20	0CW4141P075//	AG	DS	N	C	PULLEY プーリー
21	0CWNSBLT00059	AQ	EQ	N	B	BELT ベルト
22	0CW030060FWSW	AC	DJ	N	C	SCREW ビス
23	0CW4141P318//	AF	DS	N	C	SPRING スプリング
24	0CW4141P135//	AH	DX	N	C	MOTOR BRACKET モーターブラケット
25	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
26	0CW4141K230//	BL	HL	N	B	MOTOR モーター
27	0CW4141P118//	AZ	FQ	N	C	PLATE R プレート R
28	0CW4141K233//	AZ	FX	N	B	PAPER SURFACE DETECT SOLENOID 紙面検知ソレノイド
29	0CW4141P373//	AE	DJ	N	C	DAMPER CUSHION 防音クッション
30	0CWE74561WE03	AE	DS	N	C	INTERFACE CONNECTOR 中継コネクタ
31	0CW4141K223//	AR	EQ	N	C	HARNESS ハarness
32	0CW4141K220//	AQ	EQ	N	C	HARNESS ハarness
33	0CWE450001128	AC	DJ		C	BAND バンド

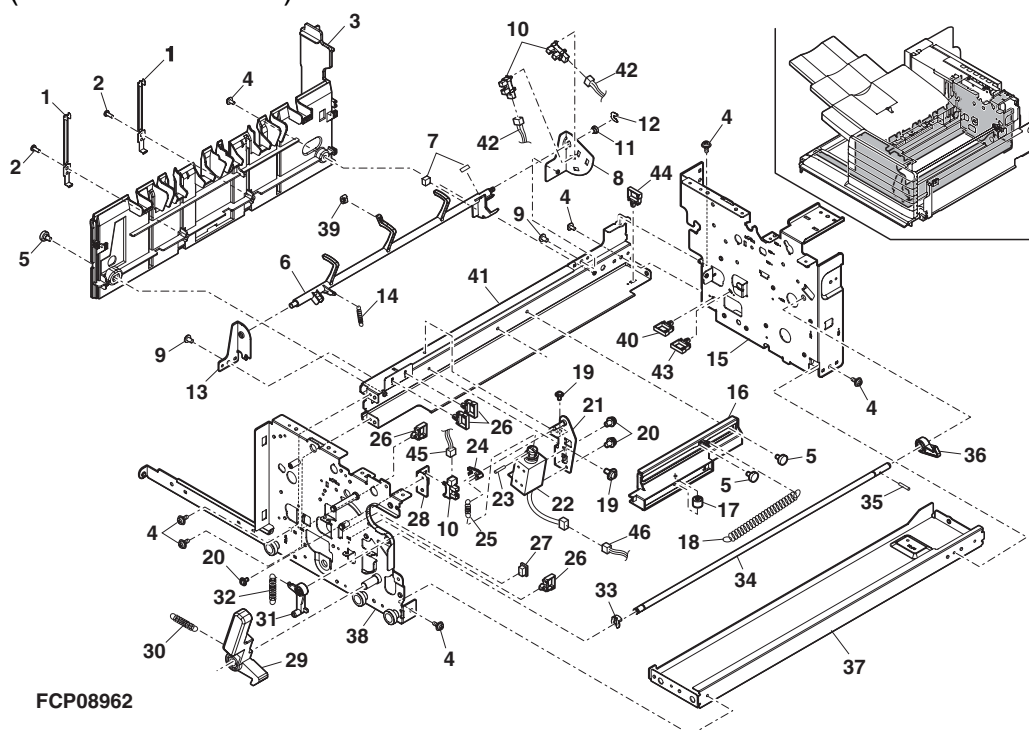
11 後フレーム部 2(REAR FRAME SECTION 2)



12 フレーム部 (FRAME SECTION)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4141P154//	AG	DX	N	C	EARTH PLATE SPRING アース板バネ
2	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
3	0CW4141P402//	BA	FX	N	D	WALL COVER 積載カバー
4	0CW030060FWTP	AC	DJ	N	C	SCREW ビス
5	0CW2205P362//	AC	DJ	N	C	SCREW ビス
6	0CW4141P400//	AS	EZ	N	C	SENSOR LEVER センサーレバー
7	0CW4141P331//	AF	DS	N	C	CUSHION クッションゴム
8	0CW4141P155//	AH	DX	N	C	SENSOR BRACKET R センサーブラケット R
9	0CW4141P167	AB	DJ	N	C	SCREW ビス
10	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
11	0CW4076P069//	AE	DS	N	C	BEARING ベアリング
12	0CW4141P426//	AD	DJ	N	C	CLIP クリップ
13	0CW4141P156//	AF	DS	N	C	BEARING BRACKET F 軸受けブラケット F
14	0CW4141P310//	AC	DJ	N	C	SPRING スプリング
15	0CW4141K011//	BA	FX	N	C	SIDE PLATE R(INSIDE) 側板 R(内側)
16	0CW4141P422//	AK	DX	N	D	ROLLER HOLDER コロホルダー
17	0CW4141P421//	AE	DJ	N	C	ROLLER コロ
18	0CW4141P324//	AG	DX	N	C	SPRING スプリング
19	0CWNSSCR00016	AC	DJ	N	C	SCREW ビス
20	0CW030050FWWS	AC	DJ	N	C	SCREW ビス
21	0CW4141K009//	BA	FX	N	C	SOLENOID FIXING BRACKET ソレノイド固定ブラケット
22	0CW2294P420//	AZ	FQ	N	B	PAPER SURFACE DETECT SOLENOID 紙面検知ソレノイド
23	0CWSP03010FPA	AA	DD	N	C	PIN ピン
24	0CW4141P401//	AE	DJ	N	C	LINK LEVER リンクレバー
25	0CW4141P309//	AD	DJ	N	C	SPRING スプリング
26	0CWE450001146	AC	DJ	N	C	CLAMP クランプ
27	0CWE74561WE03	AE	DS	N	C	INTERFACE CONNECTOR 中継コネクタ
28	0CW4141P157//	AF	DS	N	C	SENSOR BRACKET センサーブラケット
29	0CW4141P046//	AK	DX	N	C	FINISHER LOCK LEVER フィニッシャーロックレバー
30	0CW4141P308//	AD	DJ	N	C	SPRING スプリング
31	0CW4141P080//	AF	DS	N	C	FRONT LOCK LEVER 手前ロックレバー
32	0CW4141P348//	AD	DJ	N	C	SPRING スプリング
33	0CWNSCLP00008	AE	DJ	N	C	CLIP クリップ
34	0CW4141P208//	AU	EZ	N	C	LOCK PAWL SHAFT ロック爪軸
35	0CW020120SCH//	AA	DD	N	C	PIN ピン
36	0CW4141P079//	AE	DS	N	C	LOCK PAWL-R ロック爪 R
37	0CW4141P120//	AY	FQ	N	C	STAY ステイ
38	0CW4141K007//	BB	GD	N	C	SIDE PLATE F 側板 F
39	0CW4102P386//	AK	DX	N	C	CUSHION クッション
40	0CWE450001139	AC	DJ	N	C	CLAMP クランプ
41	0CW4141P119//	AY	FQ	N	C	STAY ステイ
42	0CW4141K213//	AL	EB	N	C	HARNESS ハーネス
43	0CWE450001148	AE	DS	N	C	CLAMP クランプ
44	0CWE450001140	AC	DJ	N	C	CLAMP クランプ
45	0CW4141K224//	AK	DX	N	C	HARNESS ハーネス
46	0CW4141K220//	AQ	EQ	N	C	HARNESS ハーネス

12 フレーム部 (FRAME SECTION)



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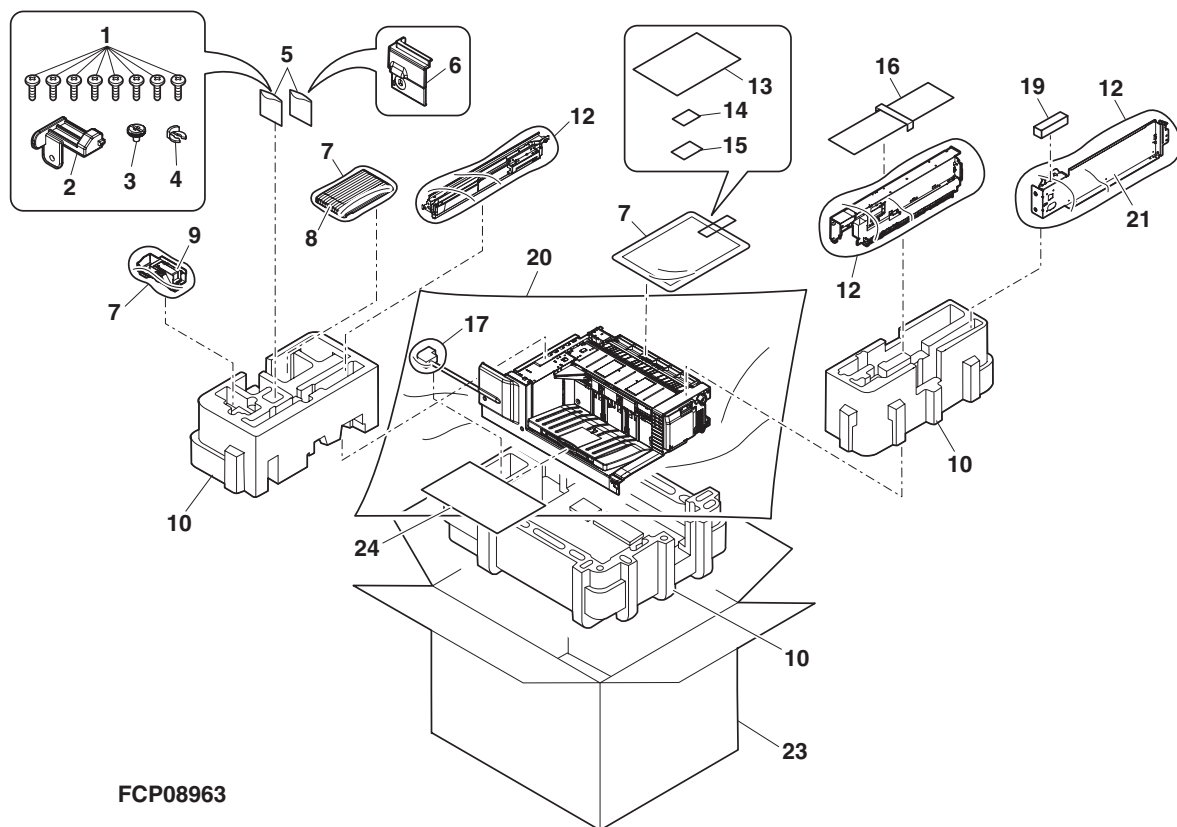
13 梱包 & 付属品 (PACKING MATERIAL & ACCESSORIES)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW040080FWBP	AC	DJ	N	C	SCREW ビス
2	0CW4141P047//	AE	DS	N	D	FINISHER SLIDE STOPPER フィニッシャースライド ストッパー
3	0CW4115P301//	AE	DJ	N	C	SCREW ビス
4	0CWNSCLP00011	AD	DJ	N	C	CLIP クリップ
5	0CW616371////	AA	DJ		D	VINYL BAG(80×120) ビニール袋
6	0CW4141P050//	AH	DX	N	D	LEFT FRONT COVER 左前カバー
7	0CW2111P021//	AC	DJ		D	VINYL BAG ビニール袋
8	0CW4141P041//	BB	GD	N	C	FRONT COVER フロントカバー
9	0CW1035P032//	AU	EZ	N	D	PUNCH COVER パンチカバー
10	0CW4141K003//	BM	HV	N	D	PAD UNIT パッドユニット
12	0CW2216P524//	AE	DS		D	VINYL BAG(HOLE) ビニール袋
13	0CW4134P420//	AF	DS		D	OPERATION MANUAL 設置手順書
14	0CW4141P362//	AL	EB	N	D	LABEL 針・穴位置ラベル
15	0CW4141P361//	AL	EB	N	D	LABEL 針・穴位置ラベル
16	0CW4141P607//	AE	DS	N	D	PAD 緩衝材
17	0CW2158P380//	AE	DJ		D	BAG 袋
19	0CW4141P611//	AE	DJ	N	D	PAD パッド
20	0CW2229P412//	AL	EB	N	D	VINYL SHEET ビニールシート
21	0CW4141K080//	BD	GN	N	E	BRACKET UNIT ブラケットユニット
23	0CW4141P601//	BH	GX	N	D	PACKING CASE (JAPAN) パッキングケース
	0CW4141P609//	BF	GN	N	D	PACKING CASE (EXCEPT JAPAN) パッキングケース
24	0CW4141P610//	AF	DS	N	D	TRAY PAD トレイ保護材

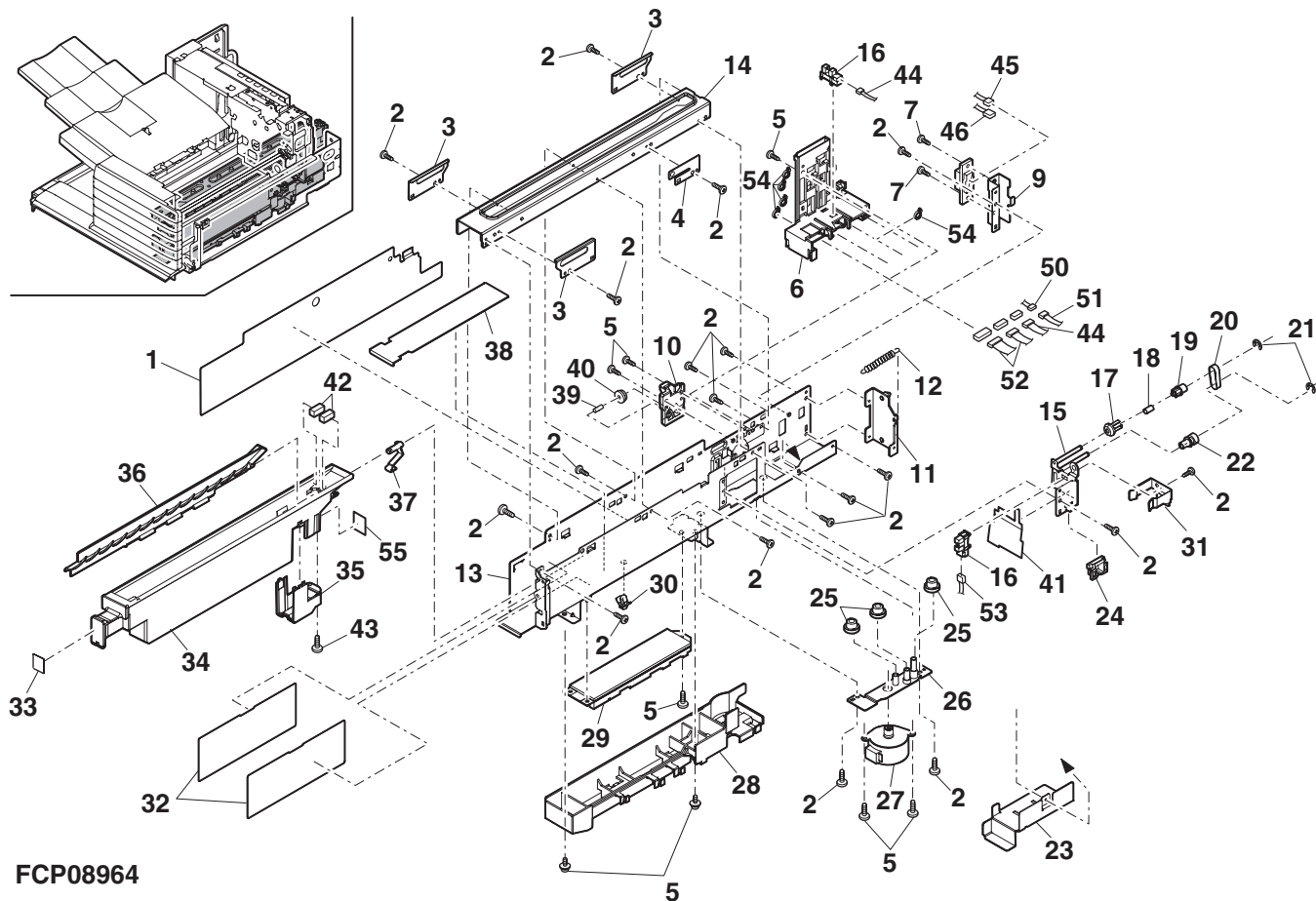
14 パンチユニット1(PUNCH UNIT 1)[MX-PNX1]

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW1035P311//	AS	EQ	N	C	SHUTTER FRAME シャッターフレーム
2	0CW030040FWBi	AC	DJ	N	C	SCREW ビス
3	0CW1035P128//	AG	DX	N	C	GUIDE PLATE ガイドプレート
4	0CW1035P130//	AG	DX	N	C	EARTH PLATE SPRING アース板スプリング
5	0CW030060FWSW	AC	DJ	N	C	SCREW ビス
6	0CW1035P029//	AN	EQ	N	D	HARNESS GUIDE ハーネスガイド
7	0CW030060FWWS	AC	DJ	N	C	SCREW ビス
9	0CW1035P102//	AL	EB	N	C	DRAWER BRACKET ドロワーブラケット
10	0CW1035P042//	AK	DX	N	C	FIXING HOLDER 固定ホルダー
11	0CW1035K013//	AP	EQ	N	C	POSITION PIN BRACKET 位置決めピンブラケット
12	0CW1035P300//	AG	DX	N	C	SPRING スプリング
13	0CW1035P100//	BC	GJ	N	C	FRAME 1 フレーム-1
14	0CW1035P110//	AY	FQ	N	C	GUIDE FRAME ガイドフレーム
15	0CW1035K044//	AR	EQ	N	C	DRIVE BRACKET 駆動ブラケット
16	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
17	0CW1035P035//	AG	DX	N	C	JOINT GEAR ジョイントギア
18	0CW1035P302//	AD	DJ	N	C	DRIVE SPRING 駆動スプリング
19	0CW1035P036//	AG	DX	N	C	DRIVE JOINT 駆動ジョイント
20	0CW1035P303//	AZ	FQ	N	B	DRIVE BELT 駆動ベルト
21	0CWER030SKP//	AA	DD		C	E-RING E-リング
22	0CW1035P034//	AG	DX	N	C	GEAR ギア
23	0CW1035P142//	AQ	EQ	N	C	HARNESS COVER ハーネスカバー
24	0CWE450000842	AC	DJ		C	EDGE SADDLE エッジサドル
25	0CW1035P008//	AF	DS	N	C	GEAR ギア
26	0CW1035K012//	AS	EQ	N	C	DRIVE SHAFT BRACKET 駆動軸ブラケット
27	0CW1035P230//	BH	GX	N	B	SIDE POSITION MOTOR 横位置モーター
28	0CW1035P028//	AR	EQ	N	D	HARNESS GUIDE ハーネスガイド
29	0CW1035K203//	BU	NN	N	E	PUNCH PWB パンチ基板
30	0CWE450000500	AF	DS	N	C	CLAMP クランプ
31	0CW1035P134//	AL	EB	N	C	PLATE SPRING 板スプリング
32	0CW1035P309//	AL	EB	N	C	SHEET LR シート左右
33	0CW4123P079//	AK	EB		D	DUST BOX LABEL ダストボックスラベル
34	0CW1035P001//	AY	FQ	N	E	DUST-BOX ダストボックス
35	0CW1035P043//	AL	EB	N	D	DUST BOX COVER ダストボックスカバー
36	0CW1035P037//	AR	EQ	N	D	DUST DETECT LEVER ダスト検知レバー
37	0CW1035P002//	AG	DX	N	C	FULL DETECTION SENSOR LEVER 満杯検知センサーレバー
38	0CW1035P308//	AN	EG	N	C	SHEET LOWER シート下
39	0CW1035P219//	AG	DX	N	C	JAM DIAL SHAFT JAMダイヤル軸
40	0CW1035P045//	AG	DX	N	C	JAM DIAL JAMダイヤル
41	0CW1035P336//	AG	DX	N	C	MYLAR マイラー
42	0CW4141P330//	AC	DJ	N	C	CUSHION クッション
43	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
44	0CW1035K213//	AP	EQ	N	C	HARNESS ハーネス
45	0CW1035K216//	AR	EQ	N	C	HARNESS ハーネス
46	0CW1035K215//	AS	EQ	N	C	HARNESS ハーネス
50	0CW1035K220//	AL	EB	N	C	HARNESS ハーネス
51	0CW1035K212//	AH	DX	N	C	HARNESS ハーネス
52	0CW1035K214//	AV	FG	N	C	HARNESS ハーネス
53	0CW1035K211//	AH	DX	N	C	HARNESS ハーネス
54	0CWE450001174	AC	DJ	N	C	CLAMP クランプ

13 梱包 & 付属品 (PACKING MATERIAL & ACCESSORIES)



14 パンチユニット 1(PUNCH UNIT 1)[MX-PNX1]



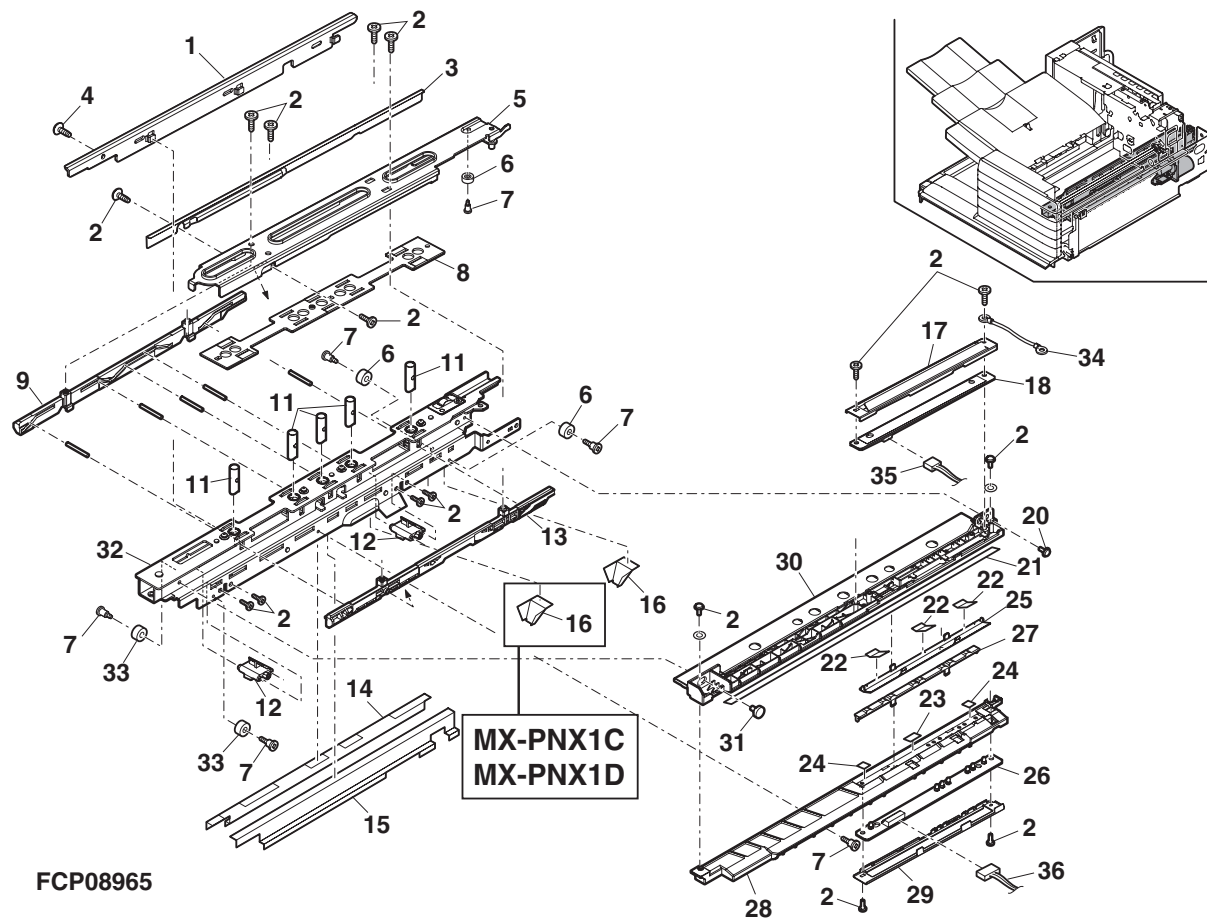
15 パンチユニット2(PUNCH UNIT 2)[MX-PNX1]

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW1035P027//	AS	EQ	N	C	EXIT GUIDE LOWER 出口ガイド下
2	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
3	0CW1035P319//	AL	EB	N	C	SHUTTER COVER UPPER [MX-PNX1B] シャッターカバー上
	0CW1035P320//	AL	EB	N	C	SHUTTER COVER UPPER [EXCEPT MX-PNX1B] シャッターカバー上
4	0CW1R4016P167	AB	DJ		C	SCREW ビス
5	0CW1035K024//	BC	GJ	N	C	SLIDE STAY [MX-PNX1B] スライドステー
	0CW1035K034//	BL	HL	N	C	SLIDE STAY [EXCEPT MX-PNX1B] スライドステー
6	0CW1020P786//	AE	DJ	N	C	PC-ROLLER PC-コロ
7	0CW1020P823//	AC	DJ		C	SCREW ビス
8	0CW1035P039//	AP	EQ	N	C	SLIDE COVER UPPER GUIDE [MX-PNX1B] スライドカバー上ガイド
	0CW1035P040//	AR	EQ	N	C	SLIDE COVER UPPER GUIDE [EXCEPT MX-PNX1B] スライドカバー上ガイド
9	0CW1035P023//	AS	EQ	N	D	CAM L [MX-PNX1A/PNX1C] カムL
	0CW1035P013//	AN	EG	N	D	CAM L [MX-PNX1B] カムL
	0CW1035P025//	AS	EQ	N	D	CAM L [MX-PNX1D] カムL
	0CW1035P210//	BB	GD	N	C	PUNCH(PUNCH-080) [MX-PNX1B] パンチ
11	0CW1035P209//	BA	FX	N	C	PUNCH(PUNCH-065) [MX-PNX1A(Q'ty2)/MX-PNX1C, PNX1D(Q'ty4)] パンチ
	0CW1035P033//	AG	DX	N	C	SLIDER スライダー
13	0CW1035P024//	AS	EQ	N	D	CAM R [MX-PNX1A/PNX1C] カムR
	0CW1035P014//	AN	EG	N	D	CAM R [MX-PNX1B] カムR
	0CW1035P026//	AS	EQ	N	D	CAM R [MX-PNX1D] カムR
	0CW1035P328//	AL	EB	N	C	MYLAR L マイラーL
15	0CW1035P327//	AL	EB	N	C	MYLAR R マイラーR
16	0CW1035P307//	AP	EQ	N	C	MYLAR マイラー
17	0CW1035P135//	AN	EG	N	C	SENSOR COVER PLATE UPPER センサカバープレート上
18	0CW1035K205//	BG	GT	N	E	PAPER SIDE DETECT SENSOR ORS PD PWB 用紙横レジスト検知センサー受光基板
20	0CW030060FWSW	AC	DJ	N	C	SCREW ビス
21	0CW1035P301//	AF	DS	N	C	MYLAR マイラー
22	0CW1035P325//	AD	DJ	N	C	TAPE テープ
23	0CW1035P326//	AG	DS	N	C	TAPE テープ
24	0CW1035P324//	AE	DJ	N	C	TAPE テープ
25	0CW1035P046//	AL	EB	N	D	SENSOR COVER センサカバー
26	0CW1035K204//	BD	GN	N	E	PAPER SIDE DETECT SENSOR LED PWB 用紙横レジスト検知センサー発光基板
27	0CW1035P015//	AL	EB	N	D	SENSOR COVER センサカバー
28	0CW1035P017//	AW	FG	N	D	ENTER GUIDE LOWER 入口ガイド下
29	0CW1035P136//	AN	EG	N	C	SENSOR COVER PLATE LOWER センサカバープレート下
30	0CW1035P019//	AX	FG	N	D	ENTER GUIDE UPPER [MX-PNX1A/PNX1C] 入口ガイド上
	0CW1035P016//	AX	FG	N	D	ENTER GUIDE UPPER [MX-PNX1B/PNX1D] 入口ガイド上
31	0CW2205P362//	AC	DJ		C	SCREW ビス
32	0CW1035K046//	BV	RB	N	E	SLIDE UNIT [MX-PNX1A] スライドユニット
	0CW1035K025//	BH	GX	N	E	SLIDE UNIT [MX-PNX1B] スライドユニット
	0CW1035K041//	BV	RB	N	E	SLIDE UNIT [MX-PNX1C] スライドユニット
	0CW1035K035//	BV	RB	N	E	SLIDE UNIT [MX-PNX1D] スライドユニット
33	0CW1020P822//	AE	DS		C	EARTH ROLLER アースコロ
34	0CW1035K221//	AH	DX	N	C	HARNESS ハーネス
35	0CW1035K218//	AR	EQ	N	C	HARNESS ハーネス
36	0CW1035K217//	AT	EZ	N	C	HARNESS ハーネス

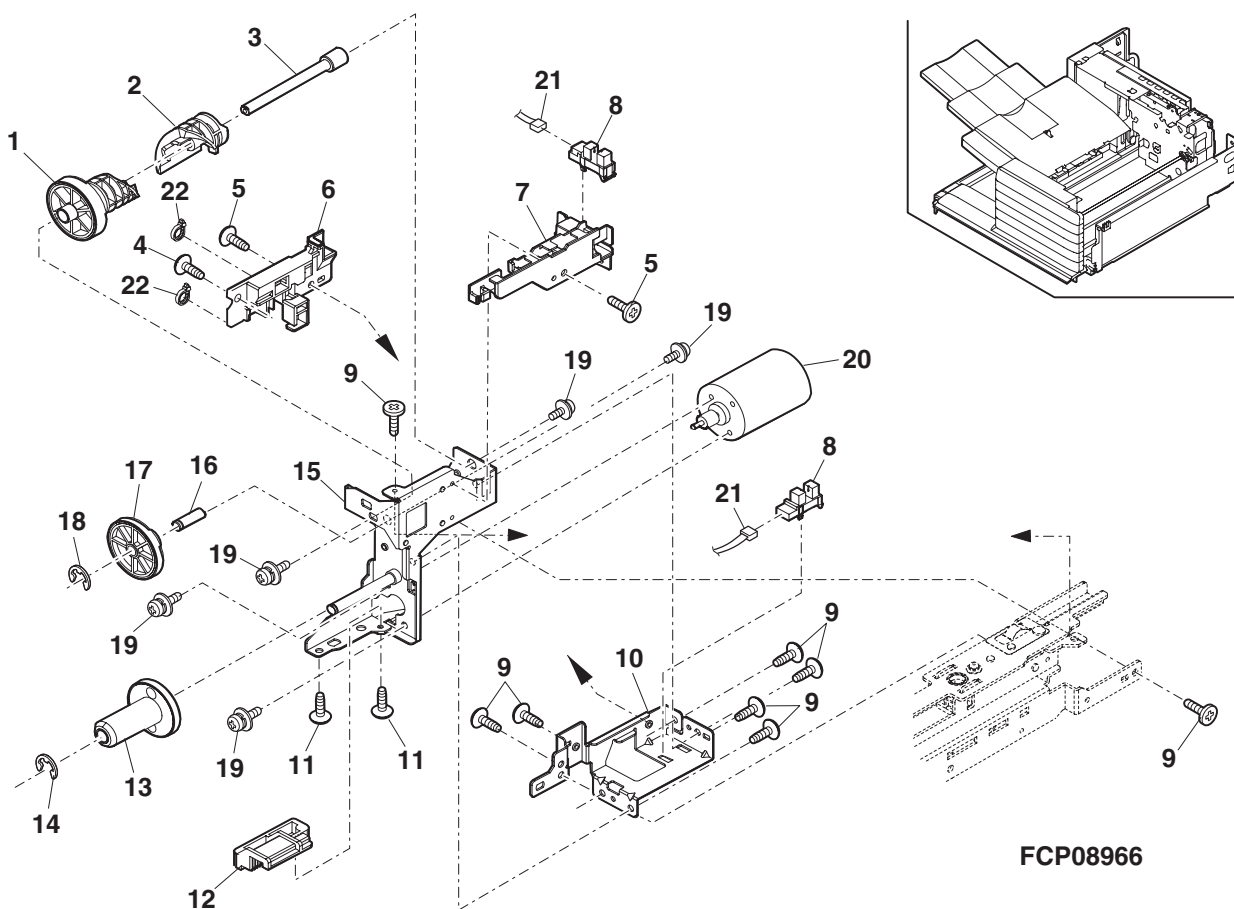
16 パンチユニット3(PUNCH UNIT 3)[MX-PNX1]

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW1035P031//	AL	EB	N	C	SPIRAL GEAR [MX-PNX1B] スパイラルギア
	0CW1035P006//	AN	EQ	N	C	SPIRAL GEAR [EXCEPT MX-PNX1B] スパイラルギア
2	0CW1035P049//	AL	EB	N	C	SPIRAL GEAR R [MX-PNX1B] スパイラルギアR
	0CW1035P048//	AN	EQ	N	C	SPIRAL GEAR R [EXCEPT MX-PNX1B] スパイラルギアR
3	0CW1035P204//	AT	EZ	N	C	SHAFT 4 シャフト4
4	0CW1R4016P167	AB	DJ		C	SCREW ビス
5	0CW030060FWSW	AC	DJ	N	C	SCREW ビス
6	0CW1035P038//	AK	EB	N	D	HARNESS GUIDE ハーネスガイド
7	0CW1035P030//	AK	EB	N	D	HARNESS GUIDE ハーネスガイド
8	0CWE314000784	AP	EQ	N	B	PHOTO SENSOR フォトセンサー
9	0CW030040FWB i	AC	DJ	N	C	SCREW ビス
10	0CW1035P108//	AR	EQ	N	C	SENSOR BRACKET センサブラケット
11	0CWNSSCR00023	AC	DJ	N	C	SCREW ビス
12	0CW1035P007//	AH	DX	N	C	SLIDE RACK スライドラック
13	0CW1035P003//	AK	DX	N	C	GEAR ギア
14	0CWER040SKP//	AB	DD		C	E-RING E-リング
15	0CW1035K028//	AU	EZ	N	C	DRIVE BRACKET 1 駆動ブラケット
16	0CW1035P202//	AN	EG	N	C	SHAFT 2 シャフト2
17	0CW1035P004//	AH	DX	N	C	GEAR ギア
18	0CWER050SKP//	AA	DD		C	E-RING E-リング
19	0CW030050FWWS	AC	DJ	N	C	SCREW ビス
20	0CW1035K231//	BH	HC	N	B	PUNCH MOTOR パンチモーター
21	0CW1035K219//	AQ	EQ	N	C	HARNESS ハーネス
22	0CWE450001174	AC	DJ	N	C	CLAMP クランプ

15 パンチユニット 2(PUNCH UNIT 2)[MX-PNX1]



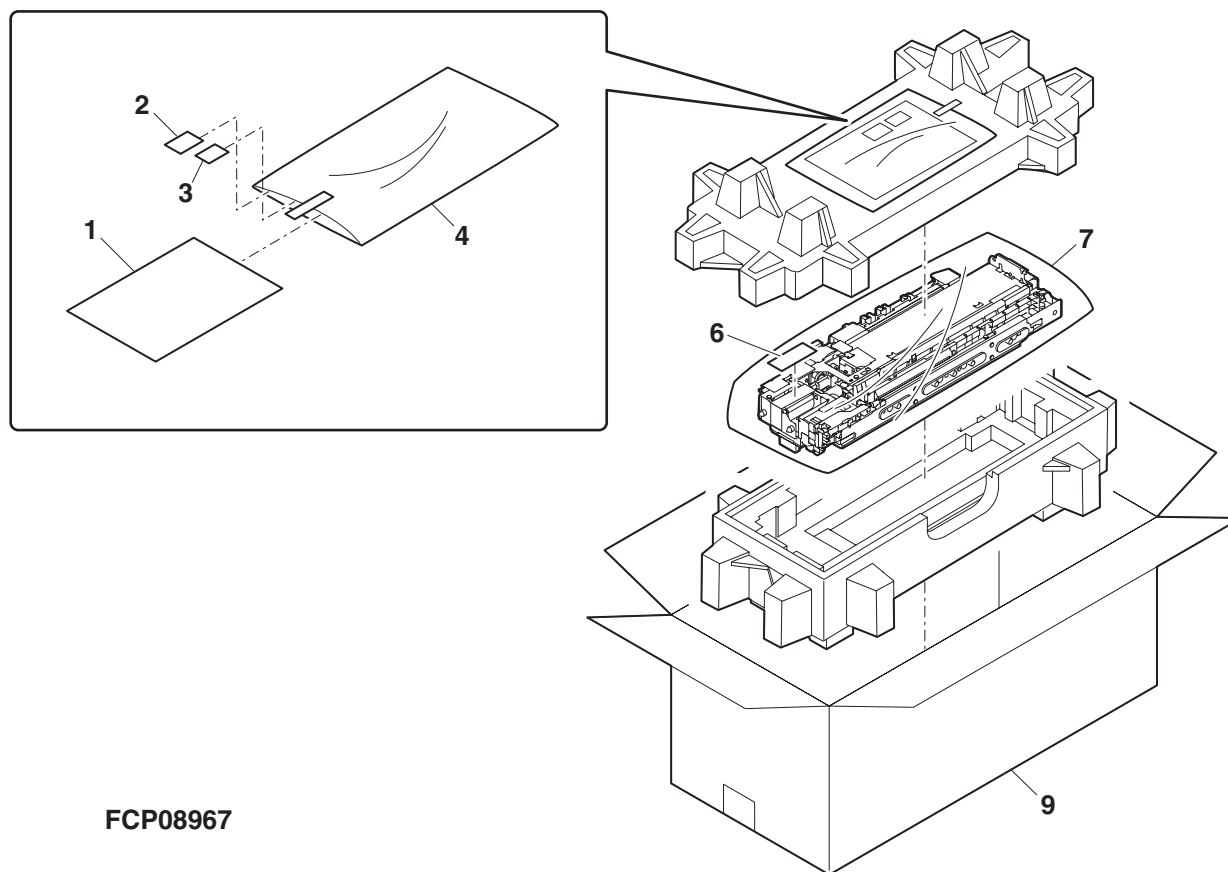
16 パンチユニット 3(PUNCH UNIT 3)[MX-PNX1]



17 梱包 & 付属品 (PACKING MATERIAL & ACCESSORIES)[MX-PNX1]

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	0CW4134P420//	AF	DS		D	INSTRATION MANUAL 設置手順書
2	0CW1035P338//	AL	EB	N	D	LABEL(LBL-PUNCH-RSDF) ラベル
3	0CW1035P337//	AL	EB	N	D	LABEL(LBL-PUNCH-FIN) ラベル
4	0CW2111P021//	AC	DJ		D	VINYL BAG ビニール袋
6	0CW1035P335//	AD	DJ	N	D	SHEET シート
7	0CW1020P832//	AF	DS		D	VINYL BAG ビニール袋
9	0CW1035P329//	AY	FQ	N	D	PACKING CASE [MX-PNX1A](JAPAN) パッキングケース
	0CW1035P332//	AX	FG	N	D	PACKING CASE (MX-PNX1B) パッキングケース
	0CW1035P331//	BA	FX	N	D	PACKING CASE [MX-PNX1A](EXCEPT JAPAN) パッキングケース
	0CW1035P334//	BA	FX	N	D	PACKING CASE (MX-PNX1D) パッキングケース
	0CW1035P333//	BA	FX	N	D	PACKING CASE (MX-PNX1C) パッキングケース

17 梱包 & 付属品 (PACKING MATERIAL & ACCESSORIES)[MX-PNX1]



FCP08967

■ 索引 (Index)

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
【0】						
0CW020100SCH/	3- 4	AA	DD		C	
"	4- 7	AA	DD		C	
0CW020120SCH/	11- 7	AA	DD		C	
"	12- 35	AA	DD		C	
"	2- 38	AA	DD		C	
"	3- 14	AA	DD		C	
"	8- 14	AA	DD		C	
0CW020140SCH/	2- 43	AB	DD		C	
0CW023100FNWS	9- 27	AC	DJ		C	
0CW030040FWBI	14- 2	AC	DJ	N	C	
"	16- 9	AC	DJ	N	C	
0CW030050FWWS	11- 4	AC	DJ	N	C	
"	12- 20	AC	DJ	N	C	
"	16- 19	AC	DJ	N	C	
"	8- 11	AC	DJ	N	C	
0CW030060FWSW	11- 22	AC	DJ	N	C	
"	14- 5	AC	DJ	N	C	
"	15- 20	AC	DJ	N	C	
"	16- 5	AC	DJ	N	C	
"	5- 36	AC	DJ	N	C	
"	8- 19	AC	DJ	N	C	
"	9- 16	AC	DJ	N	C	
0CW030060FWTP	10- 15	AC	DJ	N	C	
"	11- 3	AC	DJ	N	C	
"	12- 4	AC	DJ	N	C	
"	2- 6	AC	DJ	N	C	
"	5- 26	AC	DJ	N	C	
"	5- 29	AC	DJ	N	C	
"	6- 10	AC	DJ	N	C	
"	7- 15	AC	DJ	N	C	
"	8- 2	AC	DJ	N	C	
"	9- 10	AC	DJ	N	C	
0CW030060FWWS	10- 12	AC	DJ	N	C	
"	11- 25	AC	DJ	N	C	
"	14- 7	AC	DJ	N	C	
"	1- 6	AC	DJ	N	C	
"	2- 2	AC	DJ	N	C	
"	6- 4	AC	DJ	N	C	
"	7- 13	AC	DJ	N	C	
"	8- 22	AC	DJ	N	C	
"	9- 18	AC	DJ	N	C	
0CW040060FWBI	10- 14	AC	DJ	N	C	
"	1- 1	AC	DJ	N	C	
0CW040080FWBP	13- 1	AC	DJ	N	C	
0CW040080FWWS	6- 11	AC	DJ	N	C	
0CW1020P786//	15- 6	AE	DJ	N	C	
0CW1020P822//	15- 33	AE	DS		C	
0CW1020P823//	15- 7	AC	DJ		C	
0CW1020P832//	17- 7	AF	DS		D	
0CW1035K012//	14- 26	AS	EQ	N	C	
0CW1035K013//	14- 11	AP	EQ	N	C	
0CW1035K024//	15- 5	BC	GJ	N	C	
0CW1035K025//	15- 32	BH	GX	N	E	
0CW1035K028//	16- 15	AU	EZ	N	C	
0CW1035K034//	15- 5	BL	HL	N	C	
0CW1035K035//	15- 32	BV	RB	N	E	
0CW1035K041//	15- 32	BV	RB	N	E	
0CW1035K044//	14- 15	AR	EQ	N	C	
0CW1035K046//	15- 32	BV	RB	N	E	
0CW1035K203//	14- 29	BU	NN	N	E	
0CW1035K204//	15- 26	BD	GN	N	E	
0CW1035K205//	15- 18	BG	GT	N	E	
0CW1035K211//	14- 53	AH	DX	N	C	
0CW1035K212//	14- 51	AH	DX	N	C	
0CW1035K213//	14- 44	AP	EQ	N	C	
0CW1035K214//	14- 52	AV	FG	N	C	
0CW1035K215//	14- 46	AS	EQ	N	C	
0CW1035K216//	14- 45	AR	EQ	N	C	
0CW1035K217//	15- 36	AT	EZ	N	C	
0CW1035K218//	15- 35	AR	EQ	N	C	
0CW1035K219//	16- 21	AQ	EQ	N	C	
0CW1035K220//	14- 50	AL	EB	N	C	
0CW1035K221//	15- 34	AH	DX	N	C	
0CW1035K231//	16- 20	BH	HC	N	B	
0CW1035P001//	14- 34	AY	FQ	N	E	
0CW1035P002//	14- 37	AG	DX	N	C	
0CW1035P003//	16- 13	AK	DX	N	C	
0CW1035P004//	16- 17	AH	DX	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
0CW1035P006//	16- 1	AN	EQ	N	C	
0CW1035P007//	16- 12	AH	DX	N	C	
0CW1035P008//	14- 25	AF	DS	N	C	
0CW1035P013//	15- 9	AN	EG	N	D	
0CW1035P014//	15- 13	AN	EG	N	D	
0CW1035P015//	15- 27	AL	EB	N	D	
0CW1035P016//	15- 30	AX	FG	N	D	
0CW1035P017//	15- 28	AW	FG	N	D	
0CW1035P019//	15- 30	AX	FG	N	D	
0CW1035P023//	15- 9	AS	EQ	N	D	
0CW1035P024//	15- 13	AS	EQ	N	D	
0CW1035P025//	15- 9	AS	EQ	N	D	
0CW1035P026//	15- 13	AS	EQ	N	D	
0CW1035P027//	15- 1	AS	EQ	N	C	
0CW1035P028//	14- 28	AR	EQ	N	D	
0CW1035P029//	14- 6	AN	EQ	N	D	
0CW1035P030//	16- 7	AK	EB	N	D	
0CW1035P031//	16- 1	AL	EB	N	C	
0CW1035P032//	13- 9	AU	EZ	N	D	
0CW1035P033//	15- 12	AG	DX	N	C	
0CW1035P034//	14- 22	AG	DX	N	C	
0CW1035P035//	14- 17	AG	DX	N	C	
0CW1035P036//	14- 19	AG	DX	N	C	
0CW1035P037//	14- 36	AR	EQ	N	D	
0CW1035P038//	16- 6	AK	EB	N	D	
0CW1035P039//	15- 8	AP	EQ	N	C	
0CW1035P040//	15- 8	AR	EQ	N	C	
0CW1035P042//	14- 10	AK	DX	N	C	
0CW1035P043//	14- 35	AL	EB	N	D	
0CW1035P045//	14- 40	AG	DX	N	C	
0CW1035P046//	15- 25	AL	EB	N	D	
0CW1035P048//	16- 2	AN	EQ	N	C	
0CW1035P049//	16- 2	AL	EB	N	C	
0CW1035P100//	14- 13	BC	GJ	N	C	
0CW1035P102//	14- 9	AL	EB	N	C	
0CW1035P108//	16- 10	AR	EQ	N	C	
0CW1035P110//	14- 14	AY	FQ	N	C	
0CW1035P128//	14- 3	AG	DX	N	C	
0CW1035P130//	14- 4	AG	DX	N	C	
0CW1035P134//	14- 31	AL	EB	N	C	
0CW1035P135//	15- 17	AN	EG	N	C	
0CW1035P136//	15- 29	AN	EG	N	C	
0CW1035P142//	14- 23	AQ	EQ	N	C	
0CW1035P202//	16- 16	AN	EG	N	C	
0CW1035P204//	16- 3	AT	EZ	N	C	
0CW1035P209//	15- 11	BA	FX	N	C	
0CW1035P210//	15- 11	BB	GD	N	C	
0CW1035P219//	14- 39	AG	DX	N	C	
0CW1035P230//	14- 27	BH	GX	N	B	
0CW1035P300//	14- 12	AG	DX	N	C	
0CW1035P301//	15- 21	AF	DS	N	C	
0CW1035P302//	14- 18	AD	DJ	N	C	
0CW1035P303//	14- 20	AZ	FQ	N	B	
0CW1035P307//	15- 16	AP	EQ	N	C	
0CW1035P308//	14- 38	AN	EG	N	C	
0CW1035P309//	14- 32	AL	EB	N	C	
0CW1035P311//	14- 1	AS	EQ	N	C	
0CW1035P319//	15- 3	AL	EB	N	C	
0CW1035P320//	15- 3	AL	EB	N	C	
0CW1035P324//	15- 24	AE	DJ	N	C	
0CW1035P325//	15- 22	AD	DJ	N	C	
0CW1035P326//	15- 23	AG	DS	N	C	
0CW1035P327//	15- 15	AL	EB	N	C	
0CW1035P328//	15- 14	AL	EB	N	C	
0CW1035P329//	17- 9	AY	FQ	N	D	
0CW1035P331//	17- 9	BA	FX	N	D	
0CW1035P332//	17- 9	AX	FG	N	D	
0CW1035P333//	17- 9	BA	FX	N	D	
0CW1035P334//	17- 9	BA	FX	N	D	
0CW1035P335//	17- 6	AD	DJ	N	D	
0CW1035P336//	14- 41	AG	DX	N	C	
0CW1035P337//	17- 3	AL	EB	N	D	
0CW1035P338//	17- 2	AL	EB	N	D	
0CW2111P021//	13- 7	AC	DJ		D	
"	17- 4	AC	DJ		D	
0CW2158P380//	13- 17	AE	DJ		D	
0CW2171P609//	9- 31	AD	DJ	N	C	
0CW2205P362//	12- 5	AC	DJ		C	
"	15- 31	AC	DJ		C	
"	2- 14	AC	DJ		C	
0CW2214P393//	1- 8	AG	DX		C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
0CW2216P524//	13- 12	AE	DS		D	
0CW2229P412//	13- 20	AL	EB	N	D	
0CW2268P076//	11- 14	AD	DJ		C	
"	2- 40	AD	DJ		C	
"	3- 17	AD	DJ		C	
0CW2294P420//	12- 22	AZ	FQ	N	B	
0CW4051P361//	10- 6	AC	DJ		C	
0CW4076P069//	12- 11	AE	DS	N	C	
0CW4099P769//	6- 8	AD	DJ	N	C	
"	8- 16	AD	DJ	N	C	
"	9- 24	AD	DJ	N	C	
0CW4102P308//	5- 22	AE	DJ	N	C	
0CW4102P386//	12- 39	AK	DX	N	C	
0CW4115P301//	13- 3	AE	DJ	N	C	
0CW4123P079//	14- 33	AK	EB		D	
0CW4134P420//	13- 13	AF	DS		D	
"	17- 1	AF	DS		D	
0CW4141K003//	13- 10	BM	HV	N	D	
0CW4141K007//	12- 38	BB	GD	N	C	
"	9- 5	BB	GD	N	C	
0CW4141K009//	12- 21	BA	FX	N	C	
0CW4141K011//	11- 2	BA	FX	N	C	
"	12- 15	BA	FX	N	C	
"	6- 3	BA	FX	N	C	
0CW4141K020//	6- 5	AL	EB	N	C	
0CW4141K023//	4- 18	AQ	EQ	N	E	
0CW4141K025//	4- 19	AV	FG	N	E	
0CW4141K040//	9- 12	AG	DX	N	C	
0CW4141K051//	2- 10	AL	EB	N	E	
0CW4141K052//	2- 11	AL	EB	N	E	
0CW4141K054//	7- 19	BA	FX	N	C	
0CW4141K059//	8- 20	AL	EB	N	C	
0CW4141K062//	8- 10	AT	EZ	N	C	
0CW4141K078//	9- 21	AR	EQ	N	C	
0CW4141K079//	7- 20	AY	FQ	N	C	
0CW4141K080//	13- 21	BD	GN	N	E	
0CW4141K201//	10- 13	CN	UZ	N	E	
0CW4141K210//	8- 33	BH	HC	N	E	
0CW4141K211//	10- 32	AN	EQ	N	C	
"	8- 34	AN	EQ	N	C	
0CW4141K212//	10- 31	AN	EQ	N	C	
"	7- 23	AN	EQ	N	C	
0CW4141K213//	10- 28	AL	EB	N	C	
"	12- 42	AL	EB	N	C	
0CW4141K214//	10- 30	AQ	EQ	N	C	
"	5- 40	AQ	EQ	N	C	
0CW4141K215//	10- 27	AR	EQ	N	C	
"	9- 36	AR	EQ	N	C	
0CW4141K216//	10- 25	AR	EQ	N	C	
"	9- 37	AR	EQ	N	C	
0CW4141K217//	10- 21	AR	EQ	N	C	
0CW4141K218//	10- 22	AR	EQ	N	C	
0CW4141K219//	10- 26	BB	GD	N	C	
"	6- 26	BB	GD	N	C	
0CW4141K220//	10- 33	AQ	EQ	N	C	
"	11- 32	AQ	EQ	N	C	
"	12- 46	AQ	EQ	N	C	
"	9- 39	AQ	EQ	N	C	
0CW4141K222//	10- 23	AR	EQ	N	C	
"	5- 41	AR	EQ	N	C	
0CW4141K223//	10- 34	AR	EQ	N	C	
"	11- 31	AR	EQ	N	C	
0CW4141K224//	10- 29	AK	DX	N	C	
"	12- 45	AK	DX	N	C	
0CW4141K225//	2- 3	AG	DX	N	C	
0CW4141K227//	10- 24	AK	DX	N	C	
"	9- 38	AK	DX	N	C	
0CW4141K230//	11- 26	BL	HL	N	B	
0CW4141K232//	9- 17	BL	HL	N	B	
0CW4141K233//	11- 28	AZ	FX	N	B	
0CW4141P001//	2- 15	AZ	FQ	N	D	
0CW4141P002//	3- 26	AR	EQ	N	C	
0CW4141P003//	4- 11	AE	DJ	N	C	
0CW4141P006//	4- 14	AG	DS	N	C	
0CW4141P007//	4- 6	AR	EQ	N	B	
0CW4141P008//	4- 9	AF	DS	N	C	
0CW4141P009//	3- 18	AQ	EQ	N	D	
0CW4141P010//	2- 34	AE	DJ	N	C	
0CW4141P011//	3- 5	AG	DX	N	D	
0CW4141P012//	2- 27	AY	FQ	N	D	
0CW4141P013//	2- 36	AK	EB	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
0CW4141P014//	9- 30	AE	DS	N	D	
0CW4141P016//	2- 18	AY	FQ	N	D	
0CW4141P017//	2- 12	AW	FG	N	D	
0CW4141P018//	3- 3	AE	DS	N	C	
0CW4141P019//	7- 22	AZ	FQ	N	D	
0CW4141P020//	3- 9	AG	DS	N	D	
0CW4141P021//	2- 32	AG	DX	N	C	
0CW4141P022//	7- 3	BN	HV	N	D	
0CW4141P023//	7- 2	AY	FQ	N	D	
0CW4141P024//	7- 1	AW	FG	N	D	
0CW4141P025//	1- 2	BB	GD	N	D	
0CW4141P026//	1- 5	AW	FG	N	D	
0CW4141P027//	8- 24	AN	EG	N	D	
0CW4141P028//	7- 12	AF	DS	N	D	
0CW4141P029//	7- 7	AK	EB	N	D	
0CW4141P030//	7- 11	AF	DS	N	D	
0CW4141P031//	7- 9	AF	DS	N	D	
0CW4141P032//	7- 21	AD	DJ	N	C	
0CW4141P033//	7- 14	AF	DS	N	D	
0CW4141P034//	6- 7	AE	DS	N	C	
"	8- 13	AE	DS	N	C	
0CW4141P035//	8- 27	AE	DS	N	C	
0CW4141P036//	8- 4	AG	DS	N	C	
0CW4141P037//	7- 4	AE	DJ	N	C	
0CW4141P039//	10- 19	AE	DJ	N	C	
0CW4141P040//	8- 9	AE	DS	N	C	
0CW4141P041//	13- 8	BB	GD	N	C	
0CW4141P042//	1- 9	BA	FX	N	D	
0CW4141P046//	12- 29	AK	DX	N	C	
0CW4141P047//	13- 2	AE	DS	N	D	
0CW4141P048//	10- 11	AW	FG	N	D	
0CW4141P049//	9- 19	AN	EQ	N	D	
0CW4141P050//	13- 6	AH	DX	N	D	
0CW4141P051//	4- 4	AD	DJ	N	C	
0CW4141P052//	9- 33	AK	DX	N	C	
0CW4141P053//	9- 34	AE	DS	N	C	
0CW4141P054//	8- 7	AE	DS	N	C	
0CW4141P055//	8- 6	AF	DS	N	C	
0CW4141P056//	11- 8	AE	DS	N	C	
"	2- 39	AE	DS	N	C	
0CW4141P058//	3- 21	AQ	EQ	N	D	
0CW4141P059//	9- 1	AG	DS	N	C	
0CW4141P060//	9- 13	AF	DS	N	C	
0CW4141P062//	2- 45	AE	DS	N	C	
0CW4141P064//	3- 28	AG	DS	N	C	
0CW4141P065//	11- 9	AE	DS	N	C	
0CW4141P066//	5- 23	AK	DX	N	C	
0CW4141P069//	1- 4	BB	GD	N	D	
0CW4141P070//	2- 42	AH	DX	N	C	
0CW4141P072//	11- 17	AE	DS	N	C	
0CW4141P073//	11- 13	AE	DS	N	C	
"	3- 16	AE	DS	N	C	
0CW4141P074//	2- 4	AV	FG	N	D	
0CW4141P075//	11- 20	AG	DS	N	C	
0CW4141P076//	11- 19	AF	DS	N	C	
0CW4141P077//	4- 5	AG	DS	N	D	
0CW4141P078//	4- 17	AG	DX	N	D	
0CW4141P079//	12- 36	AE	DS	N	C	
0CW4141P080//	12- 31	AF	DS	N	C	
0CW4141P081//	1- 7	AG	DX	N	D	
0CW4141P083//	3- 27	AE	DS	N	C	
0CW4141P085//	2- 23	AE	DS	N	C	
0CW4141P086//	2- 24	AE	DS	N	C	
0CW4141P087//	9- 35	AE	DS	N	C	
0CW4141P090//	7- 5	AH	DX	N	D	
0CW4141P091//	4- 15	AF	DS	N	C	
0CW4141P092//	3- 19	AK	DX	N	D	
0CW4141P093//	3- 30	AK	DX	N	D	
0CW4141P100//	2- 9	AY	FQ	N	C	
0CW4141P101//	2- 22	AX	FG	N	C	
0CW4141P102//	8- 32	BA	FX	N	C	
0CW4141P103//	8- 23	AR	EQ	N	C	
0CW4141P104//	8- 30	AP	EQ	N	C	
0CW4141P106//	2- 5	AK	EB	N	C	
0CW4141P109//	7- 17	AN	EG	N	C	
0CW4141P114//	3- 8	AE	DS	N	C	
0CW4141P115//	8- 1	AU	EZ	N	C	
0CW4141P118//	10- 2	AZ	FQ	N	C	
"	11- 27	AZ	FQ	N	C	
0CW4141P119//	12- 41	AY	FQ	N	C	
0CW4141P120//	12- 37	AY	FQ	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
0CW4141P121//	7- 16	AG	DX	N	C	
0CW4141P122//	10- 7	AF	DS	N	C	
0CW4141P123//	10- 16	AF	EQ	N	C	
0CW4141P132//	9- 9	AS	DS	N	C	
0CW4141P135//	11- 24	AH	DX	N	C	
0CW4141P136//	9- 15	AK	EB	N	C	
0CW4141P137//	6- 15	AS	EQ	N	C	
0CW4141P138//	6- 6	AK	EB	N	C	
0CW4141P144//	6- 21	AK	EB	N	C	
0CW4141P145//	9- 3	AF	DS	N	C	
0CW4141P146//	5- 21	AX	FG	N	C	
0CW4141P147//	5- 38	AE	DS	N	C	
0CW4141P149//	5- 33	AF	DS	N	C	
0CW4141P150//	5- 19	AR	EQ	N	C	
0CW4141P151//	5- 27	AL	EB	N	C	
0CW4141P152//	5- 15	AR	EQ	N	C	
0CW4141P154//	12- 1	AG	DX	N	C	
0CW4141P155//	12- 8	AH	DX	N	C	
0CW4141P156//	12- 13	AF	DS	N	C	
0CW4141P157//	12- 28	AF	DS	N	C	
0CW4141P202//	3- 10	AQ	EQ	N	C	
0CW4141P203//	3- 25	AV	FG	N	C	
0CW4141P204//	3- 1	AW	FG	N	C	
0CW4141P208//	12- 34	AU	EZ	N	C	
0CW4141P211//	8- 26	AR	EQ	N	C	
0CW4141P225//	6- 2	AW	FG	N	C	
0CW4141P229//	5- 5	BA	FX	N	C	
0CW4141P300//	2- 17	AZ	FX	N	B	
0CW4141P301//	3- 13	AR	EQ	N	B	
0CW4141P303//	2- 1	AS	EQ	N	B	
0CW4141P304//	3- 7	AD	DJ	N	C	
0CW4141P306//	8- 21	AE	DS	N	C	
0CW4141P307//	10- 17	BD	GN	N	E	
0CW4141P308//	12- 30	AD	DJ	N	C	
0CW4141P309//	12- 25	AD	DJ	N	C	
0CW4141P310//	12- 14	AC	DJ	N	C	
0CW4141P311//	2- 37	AD	DJ	N	C	
0CW4141P312//	8- 5	AE	DJ	N	C	
0CW4141P314//	9- 32	AE	DS	N	C	
0CW4141P316//	2- 44	AD	DJ	N	C	
0CW4141P317//	2- 29	AG	DX	N	C	
0CW4141P318//	11- 23	AF	DS	N	C	
0CW4141P319//	6- 9	AD	DJ	N	C	
0CW4141P320//	5- 8	AM	EG	N	B	
0CW4141P321//	5- 14	AC	DJ	N	C	
0CW4141P322//	5- 18	AD	DJ	N	C	
0CW4141P323//	5- 11	AC	DJ	N	C	
0CW4141P324//	12- 18	AG	DX	N	C	
0CW4141P325//	6- 25	AD	DJ	N	C	
0CW4141P326//	11- 11	AE	DJ	N	C	
0CW4141P330//	14- 42	AC	DJ	N	C	
0CW4141P331//	12- 7	AF	DS	N	C	
0CW4141P335//	2- 28	AG	DX	N	C	
0CW4141P336//	2- 30	AG	DS	N	C	
0CW4141P338//	2- 35	AE	DJ	N	C	
0CW4141P339//	3- 6	AD	DJ	N	C	
0CW4141P340//	3- 20	AH	DX	N	B	
0CW4141P341//	9- 14	AC	DJ	N	C	
0CW4141P342//	8- 8	AG	DX	N	C	
0CW4141P348//	12- 32	AD	DJ	N	C	
0CW4141P352//	8- 31	AQ	EQ	N	C	
0CW4141P354//	5- 7	AN	EG	N	B	
0CW4141P356//	2- 19	AC	DJ	N	C	
0CW4141P357//	2- 31	AD	DJ	N	C	
0CW4141P359//	1- 10	AS	EZ	N	D	
0CW4141P361//	13- 15	AL	EB	N	D	
0CW4141P362//	13- 14	AL	EB	N	D	
0CW4141P365//	2- 41	AE	DJ	N	C	
0CW4141P366//	5- 42	AG	DX	N	C	
0CW4141P367//	2- 8	AS	EQ	N	B	
0CW4141P370//	2- 26	AE	DJ	N	C	
0CW4141P371//	2- 25	AE	DJ	N	C	
0CW4141P372//	4- 8	AY	FQ	N	B	
0CW4141P373//	11- 29	AE	DJ	N	C	
0CW4141P376//	5- 43	AD	DJ	N	C	
0CW4141P377//	5- 44	AD	DJ	N	C	
0CW4141P385//	5- 47	AF	DS	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
0CW4141P389//	2- 7	AD	DJ	N	C	
0CW4141P391//	5- 46	AD	DJ	N	C	
0CW4141P392//	5- 45	AE	DS	N	C	
0CW4141P400//	12- 6	AS	EZ	N	C	
0CW4141P401//	12- 24	AE	DJ	N	C	
0CW4141P402//	12- 3	BA	FX	N	D	
0CW4141P404//	5- 28	AE	DJ	N	C	
0CW4141P405//	6- 14	AE	DS	N	C	
0CW4141P408//	9- 22	AF	DS	N	C	
0CW4141P409//	9- 23	AF	DS	N	C	
0CW4141P410//	6- 13	AG	DX	N	C	
0CW4141P411//	5- 1	AH	DX	N	C	
0CW4141P412//	5- 6	AE	DJ	N	C	
0CW4141P413//	5- 13	BF	GN	N	D	
0CW4141P414//	5- 10	AG	DS	N	D	
0CW4141P415//	5- 12	AE	DS	N	D	
0CW4141P416//	5- 9	AG	DS	N	D	
0CW4141P417//	5- 17	AE	DS	N	D	
0CW4141P418//	5- 25	AG	DX	N	D	
0CW4141P419//	5- 20	AL	EB	N	D	
0CW4141P420//	5- 16	AK	DX	N	D	
0CW4141P421//	12- 17	AE	DJ	N	C	
0CW4141P422//	12- 16	AK	DX	N	D	
0CW4141P424//	6- 16	AF	DS	N	C	
0CW4141P425//	6- 20	AF	DS	N	C	
0CW4141P426//	12- 12	AD	DJ	N	C	
0CW4141P427//	6- 18	AE	DJ	N	C	
0CW4141P520//	6- 12	CQ	VJ	N	E	
0CW4141P523//	11- 10	AY	FQ	N	B	
0CW4141P524//	9- 11	AY	FQ	N	B	
0CW4141P525//	8- 12	BF	GN	N	B	
0CW4141P526//	9- 20	BE	GN	N	B	
0CW4141P527//	5- 37	BF	GN	N	B	
0CW4141P528//	5- 34	BF	GN	N	B	
0CW4141P530//	9- 6	BG	GT	N	B	
0CW4141P601//	13- 23	BH	GX	N	D	
0CW4141P607//	13- 16	AE	DS	N	D	
0CW4141P609//	13- 23	BF	GN	N	D	
0CW4141P610//	13- 24	AF	DS	N	D	
0CW4141P611//	13- 19	AE	DJ	N	D	
0CW4143P225//	4- 13	AY	FQ	N	C	
0CW616371///	13- 5	AA	DJ		D	
0CWBLT00068//	11- 12	AR	EQ		B	
0CWE120001784	9- 28	AY	FQ	N	B	
0CWE314000784	12- 10	AP	EQ	N	B	
0CWE450000433	10- 4	AB	DD		C	
0CWE450000437	10- 3	AB	DD		C	
0CWE450000500	14- 30	AF	DS	N	C	
0CWE450000566	10- 8	AE	DJ		C	
0CWE450000842	14- 24	AC	DJ		C	
0CWE450001128	6- 27	AC	DJ		C	
0CWE450001128	10- 10	AC	DJ		C	
0CWE450001128	11- 33	AC	DJ		C	
0CWE450001128	5- 39	AC	DJ		C	
0CWE450001128	6- 23	AC	DJ		C	
0CWE450001128	8- 29	AC	DJ		C	
0CWE450001139	10- 1	AC	DJ		C	
0CWE450001139	11- 1	AC	DJ		C	
0CWE450001139	12- 40	AC	DJ		C	
0CWE450001139	8- 28	AC	DJ		C	
0CWE450001140	10- 20	AC	DJ		C	
0CWE450001146	12- 44	AC	DJ		C	
0CWE450001146	12- 26	AC	DJ		C	
0CWE450001148	9- 26	AC	DJ		C	
0CWE450001148	12- 43	AE	DS	N	C	
0CWE450001174	5- 31	AE	DS	N	C	
0CWE450001174	14- 54	AC	DJ	N	C	
0CWE450001174	16- 22	AC	DJ	N	C	
0CWE450001174	6- 24	AC	DJ	N	C	
0CWE450001174	8- 35	AC	DJ	N	C	
0CWE74561WE03	11- 30	AE	DS	N	C	
0CWE74561WE03	12- 27	AE	DS	N	C	
0CWER030SKP//	14- 21	AA	DD		C	

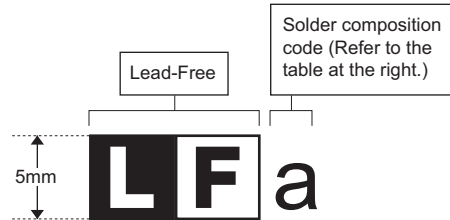
Memo

Handwriting practice lines consisting of 25 horizontal dashed lines.

LEAD-FREE SOLDER

The PWB's of this model employs lead-free solder. The "LF" marks indicated on the PWB's and the Service Manual mean "Lead-Free" solder. The alphabet following the LF mark shows the kind of lead-free solder.

Example:



<Solder composition code of lead-free solder>

Solder composition	Solder composition code
Sn-Ag-Cu	a
Sn-Ag-Bi Sn-Ag-Bi-Cu	b
Sn-Zn-Bi	z
Sn-In-Ag-Bi	i
Sn-Cu-Ni	n
Sn-Ag-Sb	s
Bi-Sn-Ag-P Bi-Sn-Ag	p

(1) NOTE FOR THE USE OF LEAD-FREE SOLDER THREAD

When repairing a lead-free solder PWB, use lead-free solder thread.

Never use conventional lead solder thread, which may cause a breakdown or an accident.

Since the melting point of lead-free solder thread is about 40°C higher than that of conventional lead solder thread, the use of the exclusive-use soldering iron is recommendable.

(2) NOTE FOR SOLDERING WORK

Since the melting point of lead-free solder is about 220°C, which is about 40°C higher than that of conventional lead solder, and its soldering capacity is inferior to conventional one, it is apt to keep the soldering iron in contact with the PWB for longer time. This may cause land separation or may exceed the heat-resistive temperature of components. Use enough care to separate the soldering iron from the PWB when completion of soldering is confirmed.

Since lead-free solder includes a greater quantity of tin, the iron tip may corrode easily. Turn ON/OFF the soldering iron power frequently.

If different-kind solder remains on the soldering iron tip, it is melted together with lead-free solder. To avoid this, clean the soldering iron tip after completion of soldering work.

If the soldering iron tip is discolored black during soldering work, clean and file the tip with steel wool or a fine filer.

CAUTION FOR BATTERY REPLACEMENT

(Danish)

ADVARSEL !

Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri

af samme fabrikat og type.

Levér det brugte batteri tilbage til leverandoren.

(English)

Caution !

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type

recommended by the manufacturer.

Dispose of used batteries according to manufacturer's instructions.

(Finnish)

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.

Vaihda paristo ainoastaan laitevalmistajan suosittelemaan

tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden

mukaisesti.

(French)

ATTENTION

Il y a danger d'explosion s' il y a remplacement incorrect

de la batterie. Remplacer uniquement avec une batterie du

même type ou d'un type équivalent recommandé par

le constructeur.

Mettre au rebut les batteries usagées conformément aux

instructions du fabricant.

(Swedish)

VARNING

Explosionsfara vid felaktigt batteribyte.

Använd samma batterityp eller en ekvivalent

typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt fabrikantens

instruktion.

(German)

Achtung

Explosionsgefahr bei Verwendung inkorrektter Batterien.

Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder

vom Hersteller empfohlene Batterien verwendet werden.

Entsorgung der gebrauchten Batterien nur nach den vom

Hersteller angegebenen Anweisungen.

CAUTION FOR BATTERY DISPOSAL

(For USA, CANADA)

"BATTERY DISPOSAL"

THIS PRODUCT CONTAINS A LITHIUM PRIMARY
(MANGANESE DIOXIDE) MEMORY BACK-UP BATTERY
THAT MUST BE DISPOSED OF PROPERLY. REMOVE THE
BATTERY FROM THE PRODUCT AND CONTACT YOUR
LOCAL ENVIRONMENTAL AGENCIES FOR INFORMATION
ON RECYCLING AND DISPOSAL OPTIONS.

"TRAITEMENT DES PILES USAGÉES"

CE PRODUIT CONTIENT UNE PILE DE SAUVEGARDE DE
MÉMOIRE LITHIUM PRIMAIRE (DIOXYDE DE MANGANESE)
QUI DOIT ÊTRE TRAITÉE CORRECTEMENT. ENLEVEZ LA
PILE DU PRODUIT ET PRENEZ CONTACT AVEC VOTRE
AGENCE ENVIRONNEMENTALE LOCALE POUR DES
INFORMATIONS SUR LES MÉTHODES DE RECYCLAGE ET
DE TRAITEMENT.

SHARP

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